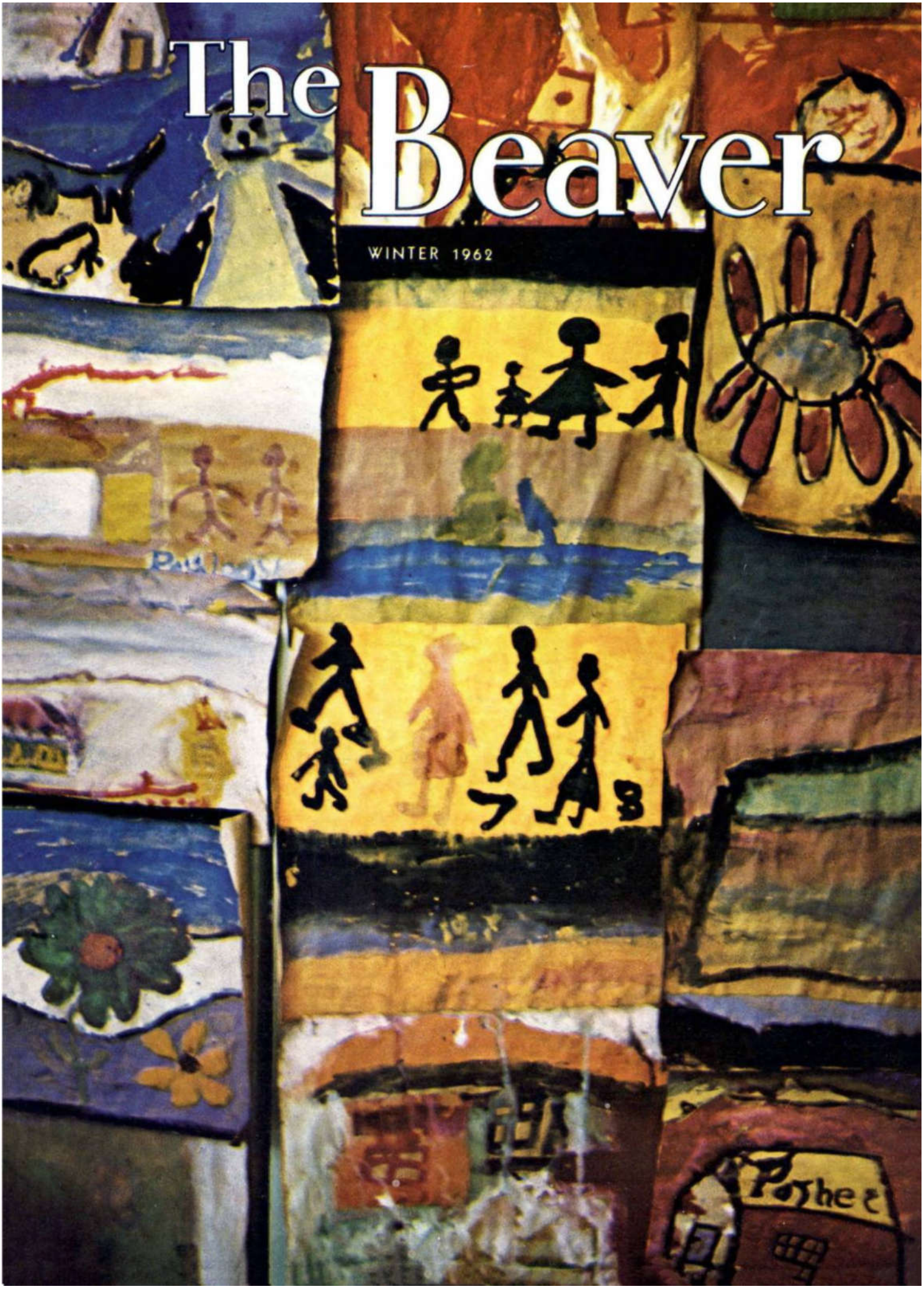
The Beaver

WINTER 1962



The UNCHANGED Standard: "choice goods as can be bought for money"

"We have sent you full Indent of Trading Goods: Stores and Provisions and instead of 150 Blankets which we thought might be too few, we have sent 225. The Flannel, now sent we have chose out of a thicker Sort, but yet very fine and good . . . Let us know whether the Size of the Crown of the Hats are pleasing to the Natives."

LETTER TO RICHARD NORTON, PRINCE OF WALES'S FORT, FROM THE GOVERNOR AND COMMITTEE, LONDON, MAY 1, 1740

Hudson's Bay Company.

INCORPORATED 2ND MAY 1670

WINTER 1962
OUTFIT 293
$2 A YEAR

The Beaver

MAGAZINE OF THE NORTH

Editor: Malvina Bolus

CONTENTS

A BEAR FABLE? 4
C. R. Harington

EXPEDITION TO RUSSIAN AMERICA 8
Terry Pettus

THIRST DANCE OF THE CREES 20
William I. C. Wuttunee

A NEW CARIBOU PROBLEM 24
William O. Pruitt, Jr.

LAPLAND REINDEER ROUND-UP 26
Vitalis Pantenburg

30 A REMARKABLE MAP
Glyndwr Williams

37 INITIATION OF A TEACHER
Ann Stacey

40 CHILDREN IN THE NORTH
Pictorial

48 SHORT RIVER WITH LONG HISTORY
John Macfie

52 VILHJALMUR STEFANSSON
Alan Cooke

55 NORTHERN BOOKS

COVER

Paintings by children, some of them Eskimo, at the Frobisher Bay federal school on Baffin Island
Photograph by Doug Wilkinson

PUBLISHED QUARTERLY BY

HUDSON'S BAY HOUSE

Hudson's Bay Company.
INCORPORATED 2ND MAY 1670

WINNIPEG 1, CANADA

Published by The Governor and Company of Adventurers of England Trading into Hudson's Bay, known as the Hudson's Bay Company. The interests of THE BEAVER cover the territory with which the Company has been or is now associated. Annual subscription, $2; three years for $5; single copy, 50 cents. While every care will be taken of manuscripts and illustrations submitted, no liability will be assumed for loss. Authorized as second class mail, Post Office Department, Ottawa, and for payment of postage in cash. Contents copyright. Printed in Canada.

A BEAR FABLE?

BY C. R. HARINGTON

Alwin Pedersen

A zoologist with the Canadian Wildlife Service, Mr Harington has been studying polar bears to gather information necessary for a management program that will ensure their survival

SILENCE had fallen on the igloo, although from the sparkle in Simonie's eyes as he sipped the strong, sweet tea, I could tell that at least one more anecdote was coming. In a very deprecating manner he recalled that his uncle, who had also lived in northeastern Baffin Island, once saw a polar bear near Clyde Inlet pick up a large piece of ice—two feet or more in length according to the Eskimo's sketchy motions. Standing upright, the huge white bear rested the chunk against his right shoulder. He waited until a walrus rose near him and hurled it down with great force, crushing the animal's skull. Considering the age of the men involved, this incident may have happened as early as 1915, but no exact time can be given.

Can a polar bear really use pieces of ice for weapons in this manner? Some evidence at least indicates that these large carnivores are quite capable of upright posture and dextrous use of their forearms. It is certainly not

unusual to see the bears standing on their hind legs. In times of curiosity or stress they often tower up, simultaneously craning their long necks in varying directions, as if scanning the area by scent or sight. I have seen a female with cubs nearby carry out this routine when approached within a few hundred yards by Eskimos. Even three-month-old twin bears have been noted to stand on their hind legs for long periods of time while grappling and hugging one another in play. One rather precocious little fellow of similar age was quite able to take milk from a bottle while standing, which requires substantial balancing and manipulative skill.

That mature bears can hold an erect posture while shifting their forepaws quickly in a desired direction is attested to by Dr G. M. Sutton, who observed an adult male on Southampton Island fending off annoying gulls by standing up once or twice and swatting at them with his broad forepaws. Dr Frederick Cook, the famous explorer, saw an adult bear on northern Devon Island scoop up a piece of walrus meat estimated to weigh 100 pounds in his paws and walk away, man-like. Dr Kare Rodahl, specialist in arctic physiology and medicine, has remarked on a white bear which, after fumbling an attack on a bearded seal, "leaped up onto the floes and in his fury began to toss lumps of ice about."

Stories concerning polar bears attacking walruses in the unique manner stated above have been circulating in the Arctic for many years, although it is still doubtful how widespread they are. According to traditions of the Eskimos now living in the northern part of Baffin Island, the ice bear, whose claws are thought to be ineffective against the tough hide of the walrus (not to mention its thick skull), is said to club the tusked mammal to death with a huge block of ice which it selects and shapes near the scene of the "crime." A carving by Lazalusi of Arctic Bay illustrates the tradition very imaginatively. Some Eskimos even maintain that in winter, if the ice-block is not large enough, the bear will dip it in freezing water until it attains a suitable size. An Eskimo woman once told me that she had heard a similar story near Port Burwell on the northeastern tip of Ungava Bay. In this instance, however, the theme was varied, for the bear was said to have alternately licked a piece of ice and rolled it in snow until an ice-block of suitable size had accreted. Nor did the bear in this account kill a walrus with it, but a seal.

Perhaps it is fitting to look back over some of the historical records that deal with the "fable" in an attempt to establish the core of truth or fancy behind it. Possibly the earliest historical record of white bears using missiles to conquer the hefty walruses has its source in Greenland. Otto Fabricius, who wrote the first authoritative account of mammals there, noted in 1780 that, ". . . in the combats between bears and walruses, the former frequently obtain the victory, by taking large masses of ice and dashing them against the heads of their opponents." Almost ninety years later, in 1868, Robert Brown, another Greenland expert, was able to report that, "The stories of it (the polar bear) making ice-houses, and of their gambols therein, as related by Fabricius, as well as of its combats with the Walrus, are still prevalent in Greenland."

Polar bear felling a walrus with a block of ice. A carving in whale bone by Lazalusi of Arctic Bay Courtesy "Eskimo"

From southern Greenland the scene shifts westward to Igloolik on the frozen coast of Melville Peninsula; the wintering place in 1823 of Captain George Lyon, the explorer. In January of that year, Ooyara, "a most intelligent man," described to the Captain some interesting observations on the sagacity of polar bears. "On one occasion he saw a bear swim cautiously to a large rough

piece of ice, on which two female walruses were lying asleep with their cubs. The wily animal crept up some hummocks behind this party, and with his forefeet loosened a large block of ice; this, with the help of his nose and paws, he rolled and carried until immediately

in the mid-nineteenth century, met and lived with many Eskimo groups, thus becoming well versed in their lore. Frederick Schwatka, leader of the Franklin Search Expedition, 1878-80, quotes an anecdote which Rae had received from a credible native eyewitness of the scene.

White bear killing a walrus as portrayed in an engraving from C. F. Hall's "Life Among the Esquimaux"

over the heads of the sleepers, when he let it fall on one of the old animals, which was instantly killed." According to the Eskimo, the other walrus accompanied by its young rolled with a thunderous splash into the water, but the pup of the stricken female remained by her side. The bear leapt onto the helpless young one thus completing the destruction of two animals, which it would probably not have ventured to attack openly.

Dr John Rae, during his exploration for the Hudson's Bay Company of much of the northern mainland coast

"I and two other Innuits (Eskimos) were attempting to approach some walrus, in winter, lying on the ice close to the water kept open by the strong current in Fox's Channel [Foxe Channel]. As we were getting near we saw that a large white bear was before us. He had reached, in the most stealthy manner, a high ridge of ice, immediately above where the walruses were lying. He then seized a mass of ice in his paws, reared himself on his hind legs, and threw the ice with great force on the head of a half-grown walrus and then sprang upon it." The fortunate

hunter speared the bear and took both animals! Incidentally Rae added that the bear was said to have thrown the ice as if "left-pawed."

Another tale of bear versus walrus is narrated by Captain Charles Francis Hall, who apparently gathered the story from Eskimos in the region of Frobisher Bay during the period 1860 to 1862. Hall noted that walruses in August made their way daily to suitable hauling-out grounds for the purpose of basking in the sun. "If this happens near the base of a cliff, the ever-watchful bear takes advantage of the circumstance to attack this formidable game in this way. The bear mounts the cliff and throws down upon the animal's head a large rock, calculating the distance and the curve with astonishing accuracy, and thus crushing the thick bullet-proof skull." In addition, Hall mentions that if the walrus is not instantly killed, but simply stunned, the bear rushes down to it, seizes the rock, and hammers away at the animal's skull until it is smashed.

Clearly, the core of this bear-walrus story involves an adult polar bear which first dislodges, then picks up a heavy chunk of ice in his forepaws, simultaneously standing upright. He supports the weapon against a shoulder prior to dropping it from a point of vantage upon a young or sleeping walrus below. Probably one of the most interesting ramifications of the story is the suggestion that some bears are left-handed and others right-handed, depending against which shoulder the projectile is rested!

Glancing over other evidence presented, it seems very likely that some polar bears are physically and mentally capable of missile-launching sorties on unwary walruses. There is also little reason to disbelieve some of the Eskimo accounts, especially those collected by Lyon and Rae, which were related by first-hand observers and occurred in particular locations. Also, the years of the observations can be approximated considering the ages of the observers and the dates of the records.

Eskimos, walruses, and bears are the necessary ingredients for this "fable." Therefore, good reasons prevail for the incidents mentioned being evidently restricted to Foxe Basin, Foxe Channel, Hudson Strait, Davis Strait and Baffin Bay—areas where Eskimos have dwelt and hunted for centuries and which are part of the permanent range of the Atlantic walrus in North America. Of course, polar bears are rather widely scattered throughout the Canadian Eastern Arctic, but concentrations are known to exist in the vicinity of Foxe Channel and along the northeastern coast of Baffin Island. In any case, if the activity mentioned is bear fact, it is certainly of rare occurrence. ◆

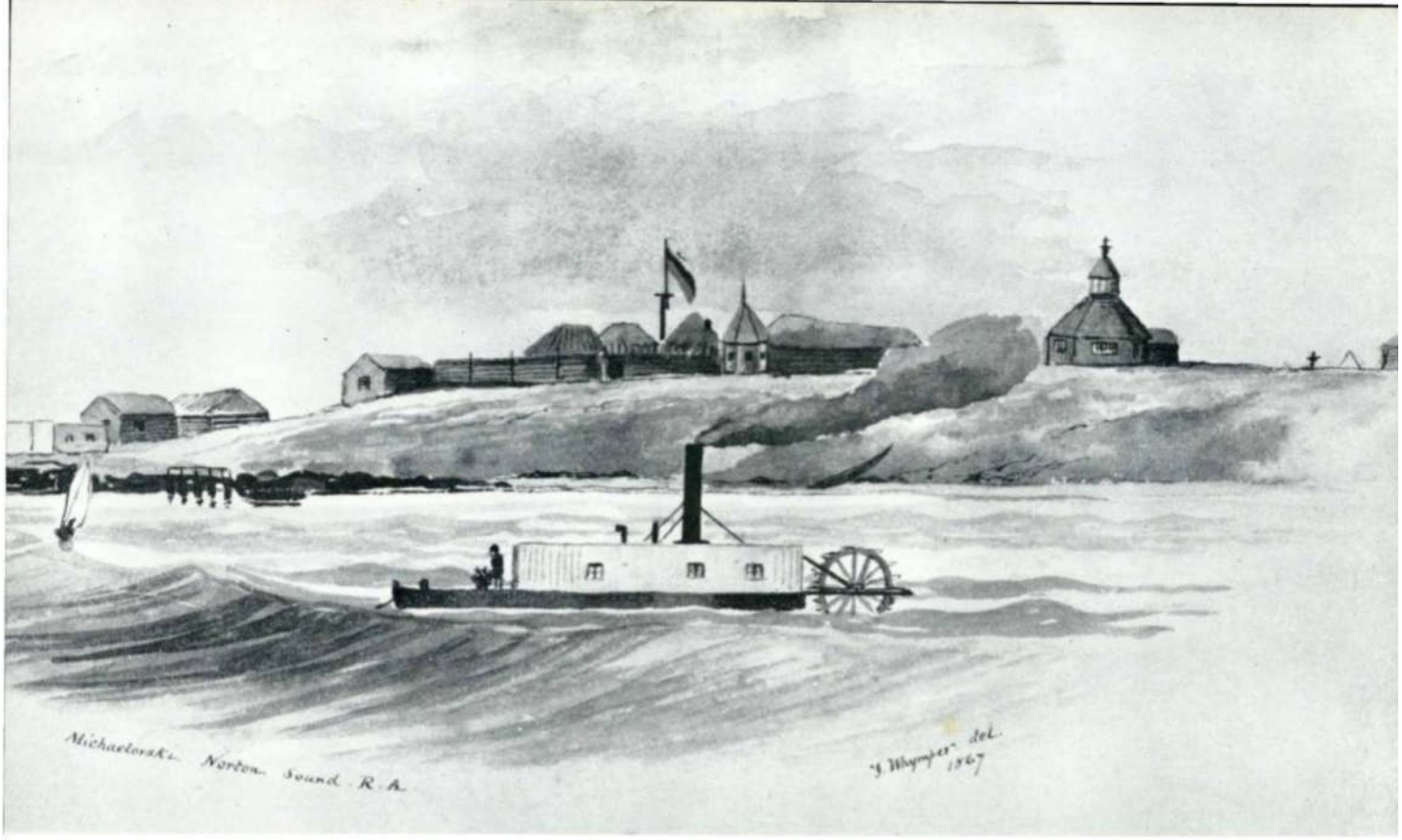
A young cub drinking milk from a bottle while standing upright

Expedition to Russian America

BY TERRY PETTUS

Michaelovski (St Michael) on Norton Sound, the redoubt occupied by the Russian commandant. From a water-colour by Frederick Whymper in 1867, now in the collection of the H B C

In the possession of the manuscript division of the University of Washington library are the four diaries of George R. Adams and Fred M. Smith who were members of the Western Union Telegraph Expedition 1865-68 that went to Russian America two years before the purchase of Alaska by the United States. This is the first time the diaries have been used for publication. They are part of the extensive collection of material relating to Alaska and the far north gathered by the late Charles S. Hubbell of Seattle and acquired by the University in 1954. Mr Hubbell obtained the diaries from a book scout who found them in a barrel of papers and manuscripts in a San Francisco junk shop. Although there are gaps, the diaries cover the period from 26 August 1865 to 8 October 1867 and they are intact except for pages torn from the Smith diary containing entries for the 13th to 17th of May 1866, the time of Major Kennicott's death. The two young men were constantly together during their service with the expedition and by chance their historically valuable diaries have been reunited. The spelling of Alaskan names was erratic in those early days so modern spelling is used in the following narrative. The first step towards standardization was the publication of "Alaska and its Resources" in 1870 by William H. Dall who succeeded Major Kennicott as Director of the Scientific Corps. This book also contains the map first published in 1869 by the U.S. Coast Survey, for which Dall, Kennicott, and Frederick Whymper, official artist to the expedition, were mainly responsible. Sketches and a map by Whymper were published in 1868 in the Journal of the Royal Geographical Society, London.

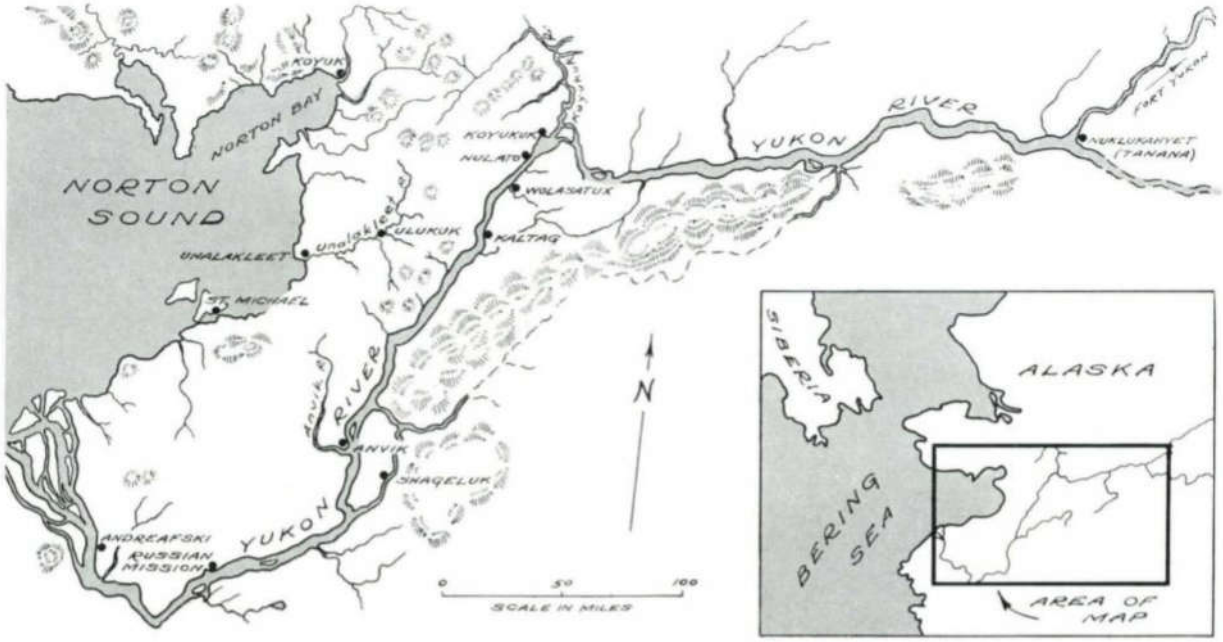


IN late September, 1865, the isolated, fortified Russian trading post of St Michael (Michaelovski Redoubt) on Norton Sound, bustled with activity and wore an air of excited anticipation which it had never experienced before and was never to know again. Riding at anchor a mile offshore, because of the shallow waters in this inlet of the Bering Sea, was the barque *Golden Gate* and the steamer *George S. Wright*, two stormy months out of San Francisco.

A fleet of small boats were busily plying between the anchored vessels and the stumpy wharf which jutted out from the low lying cluttered beach. The narrow pier was clogged with bales and boxes. Piled in a jumbled mass of machinery was the power plant of a small river steamer which had been laboriously lowered from the deck of the *Golden Gate* and towed to its mooring. Indians swarmed over this trim craft and some on the dock timidly touched the gleaming metal. Packs of lean sled dogs from the native village a half mile away added to the confusion; snarling and snapping at the strange men straining and cursing at their work.

Four long days were spent in discharging the cargo. For two days the weather held, but on the third the prevailing westerlies reached gale proportions. The *Wright* dragged her anchors and went ashore. She was refloated without serious damage. On the fourth day, the rains came, cold and needle sharp. Hurrying to finish their work, the men overloaded one of the small boats. Buffeted by the wind and chop it capsized as it neared the wharf. With the help of grappling hooks and natives who willingly plunged into the chilling waters, the boxes were recovered and piled on the beach. Days were to pass before it was discovered that they contained the expedition's guns and ammunition. By then many of the weapons were badly rusted. Most of the cartridges were ruined. It was a bad omen.

To those of the newcomers who expected that St Michael might be a comfortable town such as Sitka, disappointment was quick in coming. "It doesn't look as if it amounted to very much," was a unanimously shared opinion. Even by the standards of Russian America a century ago, the redoubt known as St Michael was not impressive. A stockade wandered round an enclosure containing a cluster of plainly built structures. The largest was the home of the Russian Commandant, Sergie Stepanoff, a genial man who welcomed visitors to his lonely outpost. There were barracks for the Russian soldiers and civilian workers, an Indian house, bath house, and storehouses. Just outside the palisade stood a small white church where services were held on those intermittent occasions when a priest of the Greek Orthodox church was available.



The Norton Sound area, as shown in the 1869 map produced from the work of the Scientific Corps

Around the church the men had erected their tents. But when the driving rains hit they were only too willing to strike camp and accept Stepanoff's invitation to use the counting house. Beds were made on the floor. "It looks something like a hospital for wounded soldiers," said one who was fresh from service in the United States Civil War.

Food was plentiful at St Michael and the Russian commandant fed his visitors well. "We fare sumptiously every day," a grateful guest reported. "Reindeer steak, roast ducks and geese, fritters and some elegant preserves made of berries which grow here abundantly. Not a bad bill of fare after living on ship diet for two months." During the two years that lay ahead, the men were to often recall the menu at St Michael. They were to experience gnawing hunger, and days when candles would be melted down for cooking fat.

The day was also to come when the sight of the unimpressive stockade would be a welcome sign of civilization to weary men bearing the body of their commanding officer, Major Robert Kennicott. St Michael was to have an important role in an historic undertaking. It was to be the supply port for the Norton Sound Division of the Western Union Telegraphic Expedition of 1865-68 in an attempt to link North America and Europe by an overland telegraph line. It was an engineering concept that for sheer breadth and boldness (if not practical planning) was to excite the attention of a world entranced by the possibilities of such new scientific wonders as the harnessing of electrical energy.

Development of the telegraph from a curiosity to a useful means of fast communication had raised hopes that somehow it could bridge the Atlantic Ocean. The completion of the Atlantic Cable in 1855 was hailed as the achievement of the century. The world celebrated—but too soon. The cable broke. It was repaired. It broke again and again. Many knowledgeable men believed that such a long underwater line would never be practical. They said another route must be found. Some turned their attention westward to the little known northland where only the narrow Bering Strait, a few miles of open water, separated two continents. Russia had strung wires from St Petersburg to the mouth of the Amur River on the east coast of Siberia. If a line were built from the United States, across Canada and Russian-America to the Bering Sea the link could be completed.

This bold concept was the brain-child of Perry Collins, United States consular agent at the mouth of the Amur. Those who lent Collins an attentive ear were the officers and directors of the Western Union Telegraph Company. A stock issue was floated to finance the venture. (Actually something like $4,000,000 was eventually spent.) Cooperation was forthcoming from the governments of the United States, Great Britain and Russia. Congress stipulated, however, that the work must be completed in three years. In the spring of 1865, when the guns of the Civil War fell silent, vast quantities of telegraphic equipment were shipped from New York to San Francisco from which port the various divisions would embark for their assigned areas of work.

Major Robert Kennicott in the uniform of the Scientific Corps, probably 1865
University of Washington Library

Five vessels were obtained and in San Francisco the expedition was organized along military lines with uniforms, flags and insignia for the various departments—Engineers, Scientific Corps, Marine, and Quartermaster. Captain Charles S. Bulkley, late of the U.S. Army Telegraphic Corps, was placed in command of the engineering branch while Major Robert Kennicott, distinguished naturalist and explorer, headed the Scientific Corps.

On May 17th, a party headed by Major Frank Pope sailed from San Francisco for British Columbia. The year before the telegraph line from San Francisco via Portland, Oregon, had reached Seattle at the southern tip of Puget Sound. It had then been extended to New Westminster, British Columbia. The assignment of the Pope party was to survey a route northward from the headwaters of the Fraser River to the headwaters of the mighty Yukon, which some still believed emptied into the Arctic Ocean.

On July 3rd, the brig *Olga* sailed carrying the party who were to explore the route for the telegraph line from the mouth of the Amur to the Anadyr River around the Ochotsk Sea. This party included Major S. Abasa, Gentleman of the Bedchamber to the Czar.

Nine days later the *George S. Wright* sailed with Major Kennicott's party on the two month voyage which was to end at St Michael. En route they would join the *Golden Gate*, carrying the telegraphic supplies. The first stops were at New Westminster and Victoria. At one of these ports they picked up the English painter, Frederick Whymper who joined the expedition as the official artist.

Sketch of George Adams on the fly-leaf of one of his diaries, by Lt Ferdinand Westdahl at St Michael in September 1866
University of Washington Library

With the cargoes from the *Wright* and the *Golden Gate* unloaded, Major Kennicott began the briefing sessions with his party on the extensive explorations to be completed by spring. Two of those to whom he gave second lieutenant commissions and the admonition "you are here to learn" were the 20-year-old San Franciscans, George Adams and Fred Smith. During the coming months Lt Adams, who spoke some Russian, was given several important assignments.

Although only 29 years of age, Major Kennicott was well equipped by experience and training for the heavy responsibility he bore. He enjoyed an international reputation as a naturalist and explorer. At the age of 21 he was one of the founders of the Chicago Academy of Science and was even then a contributor to the Smithsonian Institution. In 1859 he had gone to the far northwest of British America* and the vast area loosely known as "Hudson's Bay country." There, for three years he had worked closely with officers of the H B C, travelling from one post to another and pursuing his scientific interests.

Things looked promising when Major Kennicott outlined his original plan. Using the river steamer the *Lizzie Homer*, the party would proceed up the Yukon River. In the vicinity of the Russian trading post of Nulato and the Indian village of Koyukuk, a base of operations would be established for the party which would survey a route westward to Bering Strait across

*Beaver, September 1943.

the great peninsula which was later to bear the name of Secretary Seward. The *Lizzie Homer* would then proceed up river to Fort Yukon, an estimated 500 miles from Nulato. The route of the telegraph line would be along the banks of the river.

(At this time the Russians called the river the Kivhpak, or Kwikhpak, and both Adams and Smith used this name in their diaries. Whymper called it Kwich-pak. To the British at Fort Yukon it was the Yukon, so called by Chief Trader John Bell in 1844 from the Indian name. The nomenclature dividing line was the Indian village of Nuklukahyet, near the present site of Tanana, where both Russian and British came each year to trade. It was from the Indians at Nuklukahyet that members of the expedition in 1866 obtained information as to the "probable course" of the Tanana River. This meagre information is indicated on a map published in 1869.)

The *Lizzie Homer* proved to be a very fragile basket indeed for all of the expedition's eggs. The little steamer simply would not run. At first it was thought that the trouble was due to the engineer leaving certain parts at Sitka. Replacements were built but to no avail. Adams spent several days working on the engine only to write sadly: "Our little steamer the *Lizzie Homer* is a failure and we cannot make it go. And our intended expedition up the Kivhpak is broken up."

The loss of the steamer was a blow from which the expedition was not to recover. No one knew better than Major Kennicott the problem it was to create. With the steamer, the supply bases at Nulato and Fort Yukon could be reached before the river froze. An adequate supply of sleds, dogs and native winter clothing was not available at St Michael. The only alternative was to use the small Russian post of Unalakleet, three days up sound from St Michael, as a staging area. From there the party would try to beat the freeze-up on the Unalakleet River as far upstream as possible and then strike across country to Nulato.

On 27 September the *Golden Gate* raised anchor and sailed southward not to return until the following summer. The next day Major Kennicott's party started for their new headquarters at Unalakleet. The genial Stepanoff made available the Fort's 40-foot two-masted sloop and ten oarsmen as well as an Indian guide, Suskan, who had once visited Fort Yukon. On arriving at Unalakleet, they received a cordial welcome from the Russian *Bidarjik* (commander) who made the bath house available as sleeping quarters. The natives had already moved into their winter homes which Adams described as "houses under-ground, the entrance being through a long underground passage."

Winter was upon them but the expedition was still dangerously lacking in supplies and equipment. The natives at Unalakleet had little to spare from their stores needed to survive the long and bitter arctic winter. A foraging party was organized and Lt Adams placed in command. It was to proceed up the Unalakleet River (already dotted with ice floes) as far as the native village of Ulukuk (no longer shown on maps). His instructions from Major Kennicott were to "find out whether we can buy fish, reindeer meat and dog provisions for winter from the Indians. Also if they have any parkies* (fur coats), boots, dogs, and sleighs for sale. . . ."

Before leaving, Adams was able to buy the kind of winter outfit the entire party sorely needed. The reindeer skin coat, he wrote, "is a long garment reaching to the knees and having a hood attached to it to slip over the head. It is rather tight about the neck and requires considerable engineering for me to get myself inside but once on it is very warm and comfortable. It is worn by all the inhabitants of this country. I also got a pair of boots worn by the Indians. They are made of reindeer skin, the soles are seal skin and tie around the top and also the ankles with straps of hide. In the bottom of them they are filled with hay. They are very large and we have a good deal of sport with each other about the size of our feet. Though large and ungainly they are very warm and comfortable."

On the morning of 2 October Adams started up river. It was heavy going. "The river in some places is very rapid," he wrote, "and we had hard work to make much progress. In shallow places we used poles and poled our way along. When the beach was good we tracked. The Indians got out and by means of a long rope pulled the boat along. With alternately tracking, poling and paddling we managed to make very good progress and at 6 o'clock at night arrived at Ulukuk."

This hoped-for supply point turned out to be a "winter village of four large houses (underground)." The Indians were friendly and listened attentively as Adams explained in his fractured Russian that he had "plenty of needles, tobacco and other goods" to trade. There was no need here for bargaining. Adams gave his hosts tea "with plenty of sugar in it" and from their scant stores the native people gave him some reindeer meat, back fat and "about 20 pounds of boiled salmon."

The next day business was a little better. Adams did not have to return to Unalakleet empty handed. The villagers produced enough fish to fill the small boat. "They were large salmon and frozen hard. They keep their fish and meat fresh all winter by freezing it. I got a pair of snowshoes for the major. The ice was coming

*Parka was the Russian name for the native artiggi.

Arrival of the party at the frozen Yukon. An engraving from Whymper's book "Travel and Adventure in the Territory of Alaska" *University of Washington Library*

down the river in big chunks and I was anxious to be off." Temperatures continued to drop and by nightfall the "river was full of floating ice and the pieces crashed and ground against the bank and each other, making such a noise we could hardly hear each other speak . . . my paddle was so heavily coated with ice I could hardly lift it or make any use of it and my gloves, sleeves and coat coated with ice where water had splashed upon it and immediately frozen, so I concluded the best thing to do would be to go on shore and camp."

Their camp was only about three miles up river from Unalakleet and the next morning Adams reported "the ice was frozen solid all around us. Picking out the place where the ice was the weakest we took long poles and broke it all around the Island. We then loaded the boat and put it in the water, and hauled it around to the opposite side of the Island. It was about 20 yards across to the next Island so we got into the bidark [kayak] and broke our way across the ice. We then unloaded the bidark and carried it across the Island about 300 yards, went back for the baggage and carried that across, loaded the boat and went for the next Island. After repeating this same proceedings a number of times arrived at the fort at 3 p.m. very tired and hungry. Major Kennicott, when he heard an account of my proceedings, congratulated me on the manner I had conducted things. During my absence the boys, with the help of Indians, had built a log house and commenced another."

The two houses made Unalakleet a comfortable base both for the push eastward across the mountains to the Yukon River and northward along the coast to the head of Norton Bay from which a route was to be found across the peninsula to the Bering Strait. On 21 October Adams headed a party to return overland to Ulukuk in an effort to buy provisions for their winter trip. Major Kennicott with the rest of the party joined them at the village and on 22 October the journey to Nulato started in earnest.

Carrying 50-pound packs, the party made fifteen miles the first day and camped in sight of Vissola Soapker (Vesolia Sopka or Lone Mountain). "It is high and steep," wrote Adams, "and can be seen from a long distance up and down the valley." Temperatures dropped and the party pushed on. In difficult terrain the progress dropped to ten miles or less for a long day. On 3 November Adams reports "our provisions are getting scarce." Two days later one of the Indians killed a deer. On the evening of 6 November camp was made on a small mountain and the men had their first look at the frozen Yukon a few miles distant. Early the next morning the party jubilantly rushed out on the ice. Adams says, "I raised the American flag, the first ever raised on this river. We fired twenty-one guns." (This burst of patriotic fervour would probably have surprised their Russian hosts. While Russian America was soon to become United States territory, it would be by purchase not discovery.)

The point where the party reached the Yukon was only a few miles from Kaltag, described by Adams as a "one house village with about twenty inhabitants. . . Ate the last of our provisions tonight. It is doubtful whether we can buy any meat or fish here as the Indians seem to be

living on nothing." The next morning the party "took a light breakfast on the recollection of what we had eaten the day before and started up the river." At Kaltag the expedition acquired its first dog sled—only three dogs, however. "We ran all day, about 25 miles, and stopped at an Indian house." This was Wolasatux, no longer to be found on maps. The place was abandoned but the Indians found a three-pound cache of deer meat and "we divided that amongst us all for supper." But the party was in good spirits. They were now only fifteen miles from Nulato.

An Indian winter house at Wolasatux

Braving temperatures of 30 degrees below zero and strong head winds, the party came in sight of the Russian fort in mid-afternoon of 9 November. Several had badly frozen faces. "The Bidarjik met us at the fort gate, took us into his house and we immediately sat down to what I thought was the best meal I had ever eaten. We had salt fish raw, black bread, butter (at home I should call it lard spoilt for any purpose excepting greasing wagons), tea and white sugar. I drank fifteen cups of tea. Mike* and the Major would not be outdone by me and between the three of us we made our host's table look very clean, one small piece of bread was all of the eatables that we left on the table."

Adams says that before going to bed at 10 o'clock the men were served and ate four more big meals. Between sessions at table, they found time to look about. "Nulato," wrote Adams, "is one of the Russian Company's trading posts, built of logs in the form of a square with a courtyard in the center. The Indians have, on one or two occasions, attacked this place. An English officer was killed here. He is buried near the fort. His name was Lieut J. J. Barnard of the British Ship *Enterprise*. He was here in search of Franklin and was killed by the Koyukon Indians in one of their attacks."

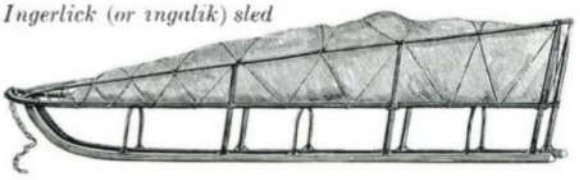
(Today's Nulato is an Indian village of about 300 population located one half mile from the site of the old Russian trading post. Nothing remains of the fort or of the house Major Kennicott bought from the Russians for $250. The grave of Lieut Barnard is still to be seen.)

On 13 November at Nulato, Major Kennicott observed his thirtieth birthday. Although showing signs of fatigue he would not rest. Impatient to complete preparations for the long trek up river to Fort Yukon, he set out for the return trip to Unalakleet on 15 November. He left written instructions with Adams to take all necessary steps "with a view of facilitating the rapid and safe expedition toward Fort Yukon" and to "make such explorations on or near the proposed route for the telegraph from Koyukuk westward as your limited means will permit." February 1st was set as the deadline for the start to Fort Yukon.

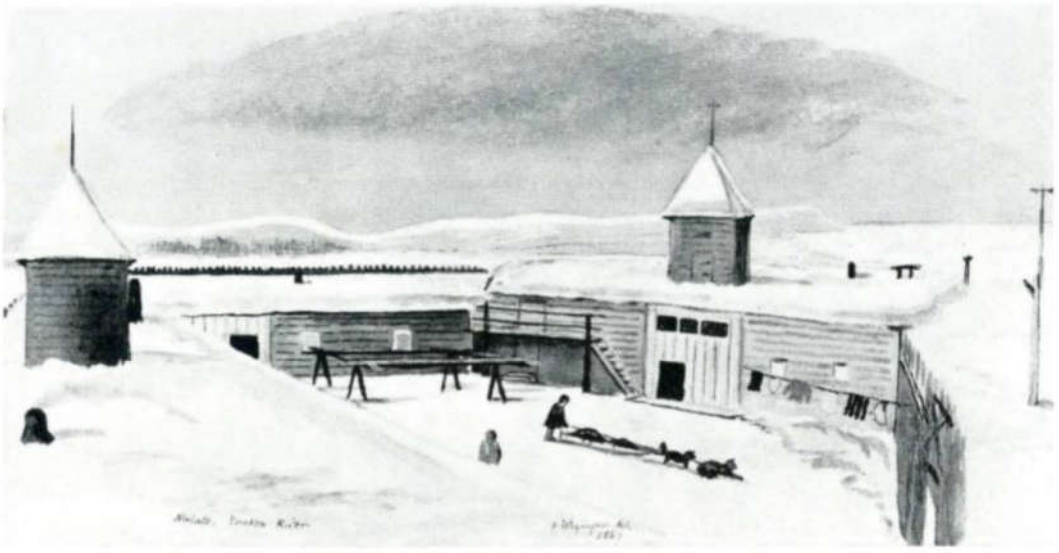
Koyukuk, some 25 miles up river from Nulato, would be a natural terminus for the line to come down the Yukon from its headwaters. The problem of finding a route through the mountains to Koyuk on the tip of Norton Sound was to harry and frustrate Adams for months. His immediate problem was to get skins for adequate winter clothing. Ivan Parviloff, the Russian commander, sent Indians to outlying villages in an effort to buy hides. "He promised that myself and party would be well supplied with winter clothing before long," Adams wrote on 7 December. But the Russian was a sick man. The visitors treated him with what medicines they had but his condition grew rapidly worse and on 8 December he died. Parviloff was buried on 10 December and two days later Adams, without equipment for the proposed cross country explorations out of Koyukuk, split his party and left for Unalakleet and the coast. The others were to bring supplies from Kaltag to Nulato.

The rest of the winter would be spent shuttling back and forth between Unalakleet and Nulato in an effort to bring in sufficient supplies to meet the 1st of February deadline for the start to Fort Yukon. The route from Unalakleet to Ulukuk and from Ulukuk to Kaltag and then up river to Nulato became painfully familiar. In January the transportation problem seemed near solution. "We bought four new, light Ingerlick sleds," Adams reports. "The ones we brought from Unalakleet were

Ingerlick (or ingalik) sled



*Michael Lebarge who in 1867 with Capt. Ketchum made a winter journey up the river to Fort Yukon and continued after break-up to Fort Selkirk.



The fort at Nulato, a trading post of the Russian American Company, from a water-colour by Frederick Whymper HBC

heavy Malemute sleighs good for going on the ice but very bad for the portage. One Malemute sleigh will weigh as much as six Ingerlick sleds. The Ingerlick sleds are made of birch. They are about ten or twelve feet long, the frame work is very light. Any one piece except the runners can be easily broken with two hands but when they are lashed together the sled is very strong. It bends like a bow in going around a corner in the road or over a log. They do not look as if they would carry a hundred pounds but I have seen five or six hundred pounds on them."

Early in February, Major Kennicott and Lt Adams were back in Nulato. The February deadline had not been met and the search for provisions continued. It was apparent that because of the long trip from Unalakleet the men could carry little more than was needed for themselves and their dog teams. On 4 March Adams reports that Lt Fred Smith arrived from such a trip. "He had only seven dogs with him and they were almost starved. He got out of dog provisions and it rained and snowed so much it was only with hard work that he got here at all."

On 7 March Adams reported the inevitable. The winter trip to Fort Yukon was abandoned. "It has been for some time apparent to us all that exploration to Fort Yukon in winter is impossible and if tried would most certainly be attended with loss of life," Adams's diary reads. "The snow is soft and does not get as hard as represented by the Russians and it would be impossible to get through it at the rate we would have to with loaded sleds even if we had the dogs. Out of sixteen dogs, all we have left at this place are but nine that are fit to go on a short trip and none capable of making such a trip as we have contemplated. So the winter expedition to the English Redoubt has to be given up. It has been decided to go back to Unalakleet and bring over on sleds a Bidara and Bidock [open skin boats] and provisions and be ready at the first open water to start for Fort Yukon."

This painful decision made, Major Kennicott headed the first party to return to the coast. There he was to get news of the positive accomplishments of the long, cruel winter. A party headed by Lt J. T. Dyer had completed a successful and hazardous exploration of the country between Norton Bay and the mouth of the Koyukuk River which empties into the Yukon near the Indian village of the same name. Another party including Lt W. H. Ennis and Baron Otto de Bendeleben explored a line traversing the peninsula from Koyuk on Norton Bay to Port Clarence on the Bering Strait.

In late April, all were back in Nulato and Major Kennicott made assignments. The strain of the winter's hardships and frustrations were evident in the entries made by Lt Smith. He was included in the party to make the river trip to Fort Yukon, but his friend Lt Adams was assigned to Lt Ennis to continue the overland exploration. "We have both made up our minds to leave this country this year," Smith wrote. Adams does not mention any such decision in his diary. Smith was angry and made this petulant entry. "I don't know what to make of this man (Major Kennicott). I begin to think he is crazy." He later expressed some contrition for this outburst. Lt Smith's feelings were understandable. A few lines later the youth was almost wailing: "I feel so lonesome that I do not know what to do."

May brought unmistakable signs of an end to the long, dark winter. The men became river watchers. The ice was breaking. Ducks and geese flew over. Guns banged and the men got a welcome change of diet. On 12 May the Yukon had risen more than six feet and was free of ice almost half way across. The days were longer. It was still light at 11 p.m. and the men sat outside the stockade of an evening and sang.

Saturday, 12 May 1866, was a pleasant day at Nulato. It was to be Major Kennicott's last. The account of his

death has been torn from the Smith diary but Adams gives a full account:

"While I was writing last night Major Kennicott came in and stood beside me for a minute. He then said he was tired and thought he would turn in. After I finished writing I looked at him. I thought he was asleep and said to myself that it was good, he will forget his troubles for a time at least. He has been a good deal troubled about the way things have gone since we were landed at St. Michaels and seems to take to heart our many disappointments and failures which, though it has been

A Tanana Indian, from an engraving illustrating Whymper's book *University of Washington Library*

impossible to remedy, has taken a severe hold on him and seems to have entirely broken him down. This morning we got up and had breakfast. It was late and not seeing the Major around I concluded that he had gone out to walk. About an hour after breakfast, he not coming in, we thought that some one ought to go and look for him. I was in the courtyard and some women came running up and said that the Major was lying on the beach.

"I ran down with the rest and there saw, lying on the beach about 500 yards out of the fort, the Major lying stretched out on his back. At a glance I saw our commander was gone—dead. We took him up and carried him into the Baiderjik house where he was laid out. The last seen of the Major was when he got up. He made a remark that he could not sleep. He got up and commenced writing. This was at 2 or 3 o'clock in the morning. After writing for a few minutes he got up and lit his pipe and went outside into the fort yard. He walked there for a few minutes and then the watchman opened the gates and he went out.

"This was the last seen of him until Pease, his companion from boyhood [Charles Pease, one of the botanists and zoologists assigned to the Scientific Corps] and Mike [Lebarge], taking a walk along the river bank saw him lying as I before stated. By his side was an open compass. It is supposed he was taking bearings and after leaning over and making marks on the ground, raised up and then fell down dead. The feelings of all of us today cannot be imagined by those who are not here and I could not describe them. They are too awful."

(It is believed that Major Kennicott died from heart failure brought on by nervous and physical exhaustion. For many years the erroneous report persisted that he died attempting to save a companion from drowning.)

It was not until after the publication of Dall's *Alaska and its Resources* that Major Kennicott's companions became aware that their commander carried with him an additional burden—grave doubts as to the feasibility of the venture. Perhaps this is why the plan to reach Fort Yukon became almost an obsession. Dall, who succeeded Major Kennicott as commander of the Scientific Corps, sheds some light on the question and also leaves us with some tantalizing hints.

"The route was ill chosen for the proposed line," he wrote. "Had it been over the well-trodden paths from St Paul, Minnesota, through the Hudson Bay Territory to Fort Yukon, and then down the Yukon, there is reason to believe that the line might have been built at less cost than the amount wasted on the west coast, in the mountainous region and dense forests of British Columbia. The Hudson Bay route was recommended by Mr Kennicott, but other counsels prevailed. Of other causes which tended to obstruct and defeat the intentions of the Company, it is not my province to speak. The line which was put up in British Columbia, with the exception of the very small portion in use, is said on good authority to be already out of repair and quite useless."

Lt Adams, who shared a room with Major Kennicott, went through his papers. There was evidence that Major Kennicott knew he was much more ill than his companions realized. He left written instructions that in event of his death the expedition was to split into two parties, one proceeding up river to Fort Yukon and the

other returning to St Michael by way of the Yukon and Norton Sound. These instructions were not carried out.

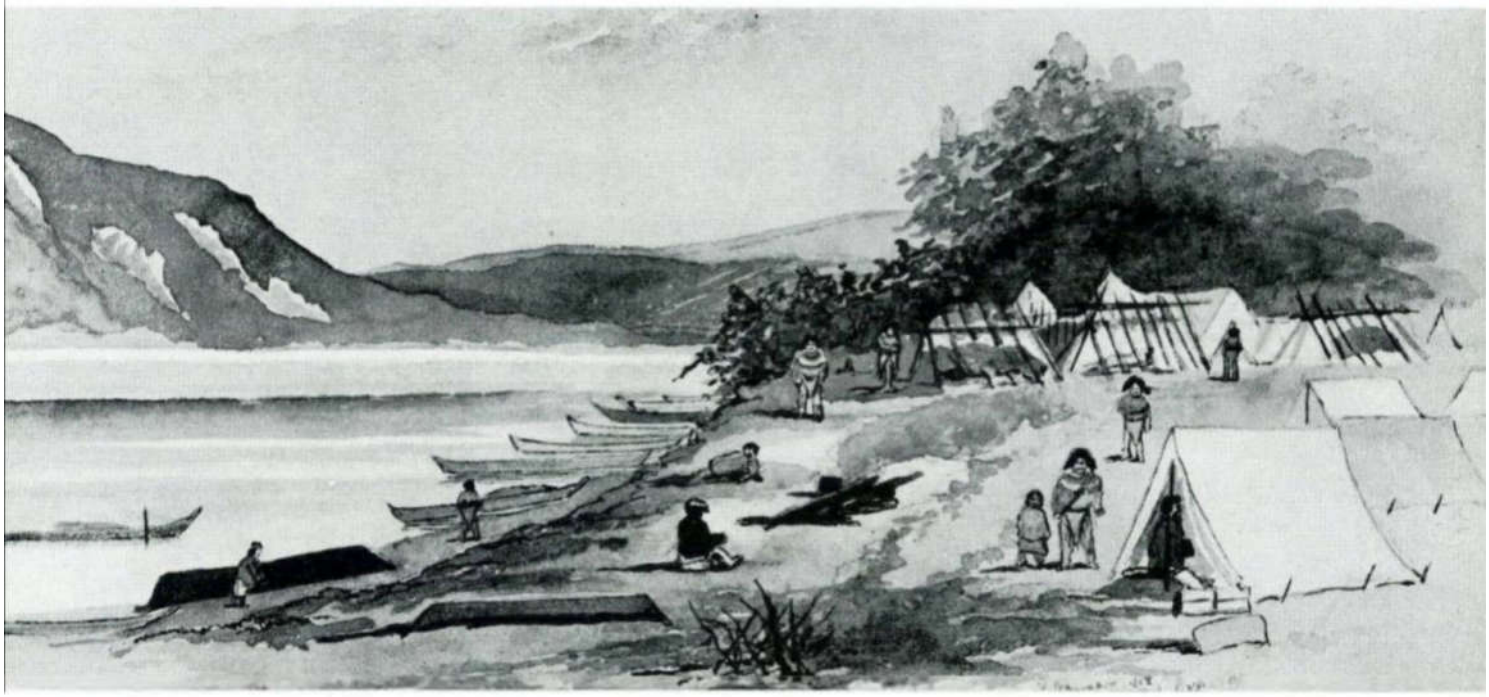
"Not one of us can bear the thought of leaving him away up here when we go," Adams wrote. The Indians sewed the body in an air-tight skin shroud. It was encased in a light coffin and temporarily buried in a grave next to that of the Russian commandant. "We intend to take the body of the Major with us to St. Michaels," Adams' diary states.

While waiting for the river to open the natives constructed a bidarra, the Russian name for an oomiak, a long open wooden-frame craft covered with sealskin. On 25 May the Yukon, a mile and a half wide at Nulato, was clear of ice and the small flotilla, the bidarra and two canoes, started down river. The party consisted of Lts Adams, Smith and Dyer, Charles Pease and three Indians. Except for rain and occasional swarms of mosquitoes, it was to be a pleasant trip, in sharp contrast to the hardships of winter travel.

About 30 miles below Kaltag, Lt Dyer and two of the Indians left the party to strike overland bringing the news of Major Kennicott's death to Unalakleet and St Michael. On 28 May the party logged 77 miles, charted forty islands since leaving Nulato, and noted 12 deserted villages. There were also many occupied villages and they discovered that the Yukon was a busy avenue of commerce.

Near Anvik, Adams reported meeting one of the large Indian trading parties from the coast. It consisted of some fifty men, women, and children. "They were on a trading expedition around the upper mouth of the Chagaluk [Shageluk] River, around the lower mouth and down the Kivhpak [Yukon]. They came across country from Norton Sound to the Anvick River. They bring their baidaras (of which they had six when I saw them) across in the winter to the Anvick and then in early spring they start on their round trip. The furs they buy along the way they sell to the whalers and ships coming up to the coast of Russian-America. I bought some gloves and a squirrel skin parka from them." These Indians were apparently engaged in the "illegal" trade the Russians vainly sought to suppress. Members of the Western Union expedition could buy from the natives for their own use but were prohibited from dealing in furs.

On 1 June the party made its only detour, accepting the invitation of an Indian chief, travelling in a large



A Whymper water-colour showing an unnamed Indian summer encampment on the Yukon River HBC

canoe party, to visit his village. It apparently was near or at the present site of Shageluk. They exchanged gifts and the chief gave them a guide to Russian Mission. Later the next day they met a Russian priest from Andreafski (now known as Old Andreafski) who Adams said "gave us a good deal of information."

With the river running at about seven miles an hour, the party made good progress and by mid afternoon reached the Russian Mission. It was an old Indian village with some dozen large native houses. The Russian compound consisted of a church and two houses. The commandant was host for lunch. "In a small cage in his house he had a hen and a rooster," Adams reported. "They were a great curiosity to us not having seen any for so long, it seemed like civilization."

On 4 June the party reached Andreafski where they rested while their boat was cleaned, dried and greased. They were soon to leave the Yukon. On 6 June they passed through the channel into the Bering Sea. The trip up the coast was uneventful and in mid afternoon of the 9th they reached St Michael. The welcoming party included Lt Dyer who had reached Unalakleet after a two-day journey and had then proceeded to St Michael. The body of Major Kennicott was carried past the little steamer *Lizzie Homer* whose failure to operate had caused such a drastic alteration in his plans. "At noon," wrote Adams, "we had a funeral service and placed the body in a vault underneath the turret."

At St Michael even Smith abandoned any idea of returning home. He and Adams were promoted in rank to Pioneer Lieutenant with their pay increased to $100 a month. The company's construction plans had now taken a definite form. The winter of 1866-67 would be spent building the telegraph line in the Golovin District, extending from the head of Norton Bay across the peninsula, and the Norton Bay District would construct the line from Unalakleet to the head of Norton Bay. Work on that section of the line from the coast at Unalakleet across country to the Yukon River at Nulato was deferred until the summer of 1867.

Smith and Adams were assigned to the Norton Bay District. Smith's diary contains a "Work Journal" with scattered entries covering the period from 21 January through 22 March 1867. They give a vivid picture of what it meant to try to transport poles, dig holes and string wire during an arctic winter. The happiest entry is the first: "After reading of the orders we went out and selected two poles which were stripped of their bark and raised on my line. Our last bottle of whiskey was drunk on this memorable occasion to the raising of the first telegraph pole at Unalakleet."

Moose hunting in the Yukon River as depicted in Whymper's book *University of Washington library*

(By a curious coincidence at the time his companions were celebrating in Unalakleet, Major Kennicott's body was completing its long journey home. In January 1867, he was buried in the family plot at Northfield, Illinois, a suburb of Chicago.)

Labourers were recruited from among the natives. "The Indians were told a great deal about the telegraph last year; how by means of a long string from here to San Francisco we could talk to our friends and know just what was going on at the time. They were thunderstruck and it was a long time before we could get them to understand or believe us. When we commenced building the line they seemed very much pleased at it and several of them were immediately tackled and put to work digging holes. They were paid in tobacco, meals and ammunition which makes their labor come very cheap," Smith wrote.

The weather determined the progress of the work. Some days 50 holes could be dug and almost that many poles erected. Other days the howling winds stopped all activity. In February the party struck "the regular soil of the country. The ground was frozen so solid that it took my best digger two hours to dig one hole." The thermometer continued to drop and soon Smith was reporting: "I set all of the men I could spare for digging today [6 February] but the ground was so hard that they were only able to finish 15 holes. Four steel pointed crowbars were turned up and split as if they were made of tin foil. This won't do."

Soon the conditions which at first appeared intolerable were being accepted as the ordinary. A typical entry: "We had to return to camp about 2 o'clock. Blowing so hard that snow would fill up the holes as fast as we dug. Several of the party froze their noses and cheeks. Dug 14 holes before we stopped." On 28 March Smith wrote: "Almost everything has been unfavorable for us this month. Weather bad, worse crowbars, dog feed (dried deer heads) scarce and poor of its kind, men living on two meals a day, one of which only can we afford to have salt meat. The ground as hard as a Pharaoh's heart. Still with all obstacles against us we have labored. We have averaged nearly two miles in three days."

Smith's last work entry was for 22 March, and it was a grim one. Conditions turned out to be not quite so desperate as he anticipated. He had proceeded with an advance party to Koyuk, the terminus of his line and the starting point for the Golovin District's line. He found that there was no suitable timber in the valley and that logs would have to be cut and rafted down the river some 25 miles. A gale confined the men to camp as Smith wrote: "Blowing harder than ever. . . . The Indians have been eating boot soles and old fish nets since we have been here and we fell to discussing how soup 'a la boot sole' would go. Only two nights of dog food left me now."

Andreafski on the lower Yukon

From Adams's journal we know that during the winter the line did progress mile after weary mile. The supply situation continued to be acute and men grumbled at the company for not solving the logistical problem. On 28 April he wrote: "Most of the men are unable to work. Hard work and no grub or very little has completely played them out. We are almost entirely out of provisions. Only a little tea and bran is all we have to depend on—our bacon has given out. Sugar all gone two weeks since—and bread and tea is all we will have to live on unless we can get reindeer meat."

In May Captain Ennis (he had also been promoted) ordered Adams to begin work on the line between Unalakleet and Nulato. The little steamer was now in service and communications were better. On the evening of 24 June, the Russian commandant at Unalakleet arrived at Adams's camp. He was the bearer of big news indeed. Adams records it: "Company has suspended operations. Reason; the Atlantic Cable is a success. We are all ordered home (much joy). United States bought Russia-America for $7,000,000 from Russian government. Torrent of news left us almost speechless."

No time was lost in getting to St Michael where the men impatiently awaited the return of the *Clara Belle* which would take them home. They sailed 22 August. Adams's last entry is for 8 October 1867: "Arrived in San Francisco after an absence of 27 months during which time have heard from home but twice."

Dall remained in Alaska through 1868 to complete his scientific work. The accomplishments of the Scientific Corps were given to the world in 1870 with the publication of the authoritative and detailed *Alaska and its Resources*, a volume that became a classic in its field. He reported on the conditions of the line erected during that bitter winter. It was, he said, "so poorly built that in the fall of 1867 not a single pole stood erect and perpendicular."

While both Major Kennicott and Dall believed the route through British Columbia was a waste of money and effort, time would give these objections an ironic twist. As history has shown, the route up the Fraser River would be the only part of the great effort of 1865-67 to have permanent communications value. It was incorporated into the famed Yukon Telegraph Service following the gold rush of 1896. Appropriately the official designation of this line was "Russian Extension" of the Western Union Telegraph Company.

Measured against its objective the effort to bridge the two continents with a telegraph line spanning Bering Strait was a failure. But it was a failure of heroic proportions, and stands as one of the bold ventures which marked the emergence, in the nineteenth century, of today's scientific wonders. ◆

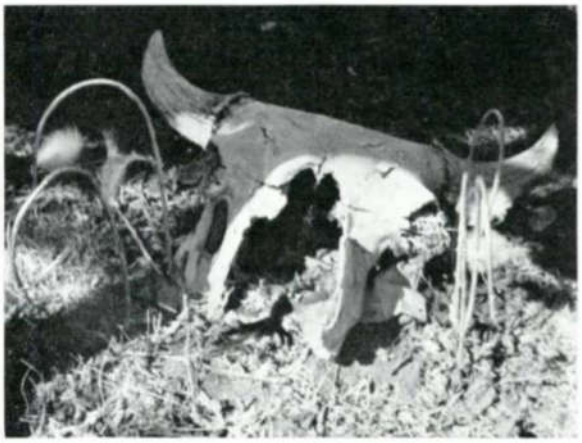
Thirst Dance of the Crees

Tipis encircle the ceremonial lodge at a Cree Thirst Dance near Edmonton in 1901

BY WILLIAM I. C. WUTTUNEE

Mr Wuttunee, who is a barrister, was born on the Red Pheasant Indian Reserve, a Cree settlement near Battleford, Saskatchewan. After some years of government legal work in Saskatchewan and Alberta he is now establishing his own practice in Edmonton. Besides attending the Thirst Dance himself in recent years, Mr Wuttunee received much information about the ceremony from his father James Wuttunee, now 78 years old, who has studied and written about the dance.

Buffalo skull altar-piece at a Cree Thirst Dance photographed in 1953 at Hobbema *Hugh A. Dempsey*



SINCE time immemorial the Plains Indians who still practice their ancient culture have annually performed the Affliction Dance, though in the 1890s the government, misunderstanding the ceremony, outlawed it because of its alleged paganistic rituals. This dance is more commonly called the Sun Dance which is actually a misnomer for the Indians do not worship the sun at all but rather they pray to Kitche Manitou, the Great Spirit. Sometimes the dance is referred to as the Rain Dance; this term probably owes its derivation to the request for rain in the prayers of the religious leader. The Cree Indians call it the Thirst Dance (*anpagwasimuk*) for during the three days and nights that the dance is performed the dancers thirst and fast. Their thirst may be quenched only by the rain that they can catch and drink, if it happens to rain during the ceremony.

Preparations for the Thirst Dance are made well in advance. These may start during the winter months or early spring when the religious leader calls together the important people of the community. To them he proclaims that he has undertaken the important office of the maker of the Thirst Dance for the coming summer.

At the first gathering the leaders of the community sit together and cut tobacco which is then put into a pouch traditionally made from the bladder of a buffalo. The pouch is then sent to various communities by carriers and in this unique way Indians across the prairies are

informed of the time and place of the coming Thirst Dance.

The last one I saw two years ago took place as usual far from the habitations of man in a very inaccessible place so as to keep out intruders. There just below a rim of hills a ceremony centuries old was once again re-enacted in all its primitive glory.

The encampment was very large and it appeared that nearly all the Indians from the surrounding country had come to fulfil their vows, bringing with them the free-will offerings and gifts that were customary. Their many tents and tipis were set in a big circle round the ceremonial lodge.

Earlier that morning when dawn was just beginning to break several spies, usually not more than twelve, had been sent out by the religious leader to look for the centre pole of the lodge. When they found a suitable tree, they had crept up to it like hunters stalking prey. They removed some branches and brought them into camp, making sure not to be seen until they had reached the centre of the encampment. As soon as they were noticed the people rushed forward to take sprigs for good luck.

Other men with horses, lariats and hairlines were then sent out to get the tree. When they reached the tree, the men first sat and smoked, while an elderly man asked for blessing. Two men then chopped the tree, which must fall southward. The tree was then trimmed and must measure 3½ times the length of an average man's outstretched arms. Finally it was hauled by the horses to the camp.

As the sun was reaching its zenith, the religious leader started to walk around the encampment dragging a buffalo skull behind him on a leather thong, crying all the time. It was a steady wail that seemed to chill the very marrow of my bones. He was crying, sorry perhaps for his sins, for the loss of some dear child, or for some departed relative.

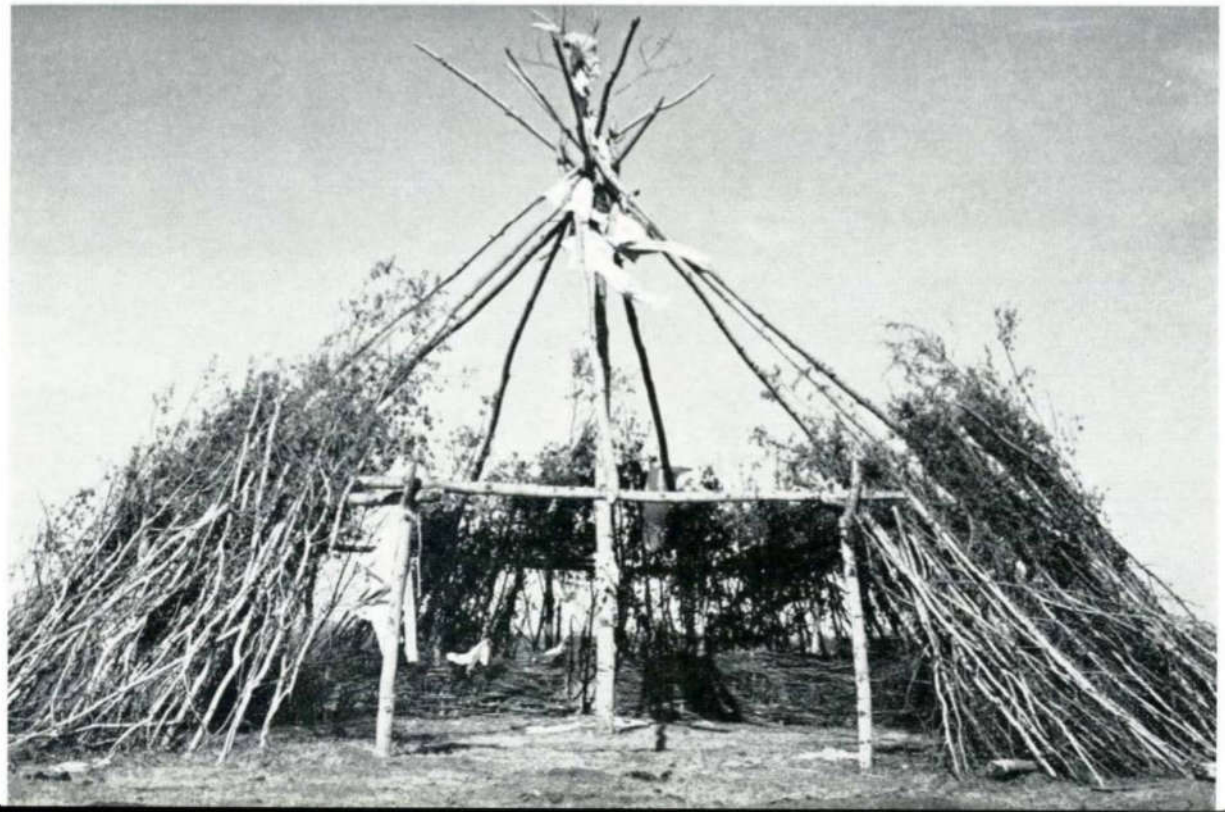
Later that afternoon the religious leader stepped out of his tipi flanked by his aides. He was dressed only in a breech-cloth of many colours. His face and body were covered with various colours of ochre. In his hands he carried the wings of an eagle.

This was to be the raising of the centre pole into its position in a hole two feet deep, lined with cloth and scented with burning sweet grass. On the tree were tied beautiful bolts of bright coloured cloth, representing the alms of some of the dancers, and long leather thongs were attached to the forked top. Right below the bolts of cloth there was built a nest of sturdy branches where during earlier times a man would sit praying and waiting for rain. Below the nest, about halfway down, a thunder bird was carved out of the green bark of the pole.

The maker of the Thirst Dance sang and prayed as he stood near the centre pole which was still on the ground. Suddenly he began to blow on his whistle made from a goose bone and to rapidly flap the wings he held. The men began to pull on their ropes and as the pole slipped into place, cheers went up from the crowd.

After the pole raising ceremony, everyone helped to erect the lodge. Young men on horseback with young

Pieces of coloured cloth flutter from the centre pole of this Thirst Dance lodge at Hobbema. Saplings and branches are propped against the lodge for shelter *Hugh A. Dempsey*



Some of the participants in a dance at Battleford in 1895 *Public Archives*

women riding side-saddle behind them galloped back and forth pulling in young saplings to be used to cover the sides of the lodge.

When it was all finished, the lodge was circular in shape. It was without a roof and open to the sky except for a few branches immediately over the dancers to shelter them from the rain and the sun. Thirteen forked posts each eight feet long, were driven into the ground at least eight paces from the centre pole. Placed horizontally in the forks at the top, thirteen other poles connected these uprights. Thirteen more poles, making 40 in all, were then placed like the spokes of a wheel, overhead, and attached to the centre pole.

The lodge was finished a few minutes before sunset. The dancers took their places behind a waist high curtain of branches which was erected in a semi-circle to shield them when they were not dancing. The women were on the east side and the men on the west with the position on the north reserved for the religious leader. As the sun was setting, a calm settled over the encampment broken only by the occasional bark of a dog. This was the lull before the opening ceremony.

When the final rays of the setting sun were waning in the west, the leader stepped out of his tipi and immediately his aides fell in behind him in single file. He was dressed in a white robe which clearly accentuated his dark skin and his coal black braids which fell on his proud shoulders. He started to pray quietly and after taking a few steps he stopped and prayed again. The procession then moved slowly forward until it had reached the lodge. He entered it and took his place at the front and turned to pray with his people who had gathered all around.

On his right side sat the old men who lit up the pipe of peace. Each would solemnly take the pipe in his hands and putting it to his lips would immediately draw on it two or three times and would pass it again with both hands, stem first, to his neighbour. On the leader's left the male singers sat in a circle some with their drums and others with only a dried skin before them.

After a few more prayers were said, the singers lifted their drums. There was a slow beat at first until a steady rhythm was reached. In behind their curtain of branches, the dancers began to blow their whistles at intervals until finally all was in readiness. As the drums began to beat more loudly, the singers, keeping exact time, raised their voices to a high pitch. All around the dancers began to appear in their finery.

The women wore their hair in braids and bandeaux of beads. About their shoulders they draped shawls of silk of various hues. Each dancer blew on a goose bone whistle which was decorated with many fine ribbons and brightly coloured feathers which waved in the breeze. The men looked splendidly handsome dressed in very bright shirts with cuffs and arm bands of beads. Some had on shimmering velvet with shining sequins and wore soft white sea shells about their throats. Both men and women had their faces covered with painted symmetrical lines resembling tattoos and bright patches of pink and red.

The dancers bobbed up and down in a regular beat, keeping their feet in one place and blowing their whistles in steady short blasts. None of the dancers moved from their stationary positions nor did they shift their eyes for they must watch the centre pole at all times so as not to be distracted.

Later in the evening I saw young men riding side by side on their sleek slim-legged saddle ponies passing just a few yards in front of the tipis and tents in a circle round the camp. They sang songs of ancient origin which must have been sung many times in the past in their native tongue. They sang with lusty voices with the sound echoing far back into the hills. Although I was standing nearby, I had the impression they were singing miles away. Suddenly they broke forth with all the power which they could muster with their vocal chords. Accompanied by the steady beat of the drum, they carried out their part of the ritual.

When the night fell substitute dancers, known as the "Little Stars" danced for those who were too tired to continue. But only until morning, for as soon as the sun rises, the Little Stars disappear and the regular dancers must continue.

On the morning of the second day, the people brought their free-will offerings of blankets, cloths, and various articles. These were laid out on the foreground of the lodge. The crier then went out and called for visitors from other areas to come to the lodge. In a short while there was a group of visitors standing nearby. As each name was called out by the aides, the visitors stepped forward and selected one of the articles. In this way the people expressed their charity to their neighbours.

In the late afternoon of the second day, prayers were said by various people at the centre pole, including the leader. He came forward, gaunt and strained. He raised his arms in supplication and prayed. "O wind be good to us, O sun shine on us brightly, O Kitche Manitou we offer our thanks for the goodness of our Mother Earth. Keep it ever so."

Behind him stood an old woman who wept profusely for her dear departed children. Nearly her entire family of nine children had been wiped out by the dreaded scourge of tuberculosis. Another man prayed for his brother who, being obviously in great distress, was brought to the entrance of the lodge so that the whole camp could pray for him. After the prayers and supplications, the singers continued their ancient songs and the dancers danced in humble penance.

During the prayers, the aides passed back and forth burning incense of sweet grass and refilling and lighting peace pipes from the embers of the two small fires burning in the lodge.

Towards the end of the third day, the religious leader came from his little booth at the north part of the lodge and joined the singers. He led them in a series of special songs to end the dance. He held in his hand a rawhide rattle which he shook steadily ending in a crescendo.

At the very end of the ceremony, the singers sang a certain song. The dancers stood up in the lodge and with all the people of the camp they joined in single file and passed round the sacred centre pole touching it in a solemn manner. The little children came by and they too followed in the footsteps of their parents learning this ancient traditional ceremony. The Thirst Dance had ended for another year to be repeated again the following year when the saskatoon berries begin to ripen.

There before me I had seen the so-called pagan glory of the ages of these nomadic people. Theirs was the hour far from the encroaching whiteman and his many religions.

As I left there that night filled with thoughts of the many strange and lovely sights I had seen I wondered if the pressure of integration would force its way into the boundaries of the reserve to kill forever the last vibrant notes of the ancient rites. ◆

Dancers outside the lodge. The eagle wing fans used in the ceremony are carried by the man third from right

RCMP

Caribou in the boreal forest and tundra region in the vicinity of Dubawnt River RCAF

a NEW "Caribou Problem"

BY WILLIAM O. PRUITT, JR

THE "caribou problem" in Canada has engaged the attention of biologists for several years. The massive decline in the caribou population has resulted in tragedy for segments of the northern ecosystem, including man. While the decline has been attributed to a variety of causes, the best explanation concerns the progressive loss, over many years, of mature spruce-lichen forest. This situation of loss of the winter range through forest fires has now been superseded by another "caribou problem" of even greater seriousness.

The new problem is that caribou (and reindeer) are "hot spots" in terms of contamination with radioactive material. This is true of not only Canadian caribou but also those in Alaska, northern Scandinavia and northern USSR. Strontium-90 and Cesium-137 appear to be the primary contaminants. The source of these radionuclides is undoubtedly atmospheric nuclear explosions.

In order to understand the magnitude of the contamination one must delve into the jargon of the radiation biologist. Here one meets a welter of terms for various levels of exposure and concentration of radionuclides—rems, millirems, micro-curies, micro-micro-curies, and a newly-introduced one, nano-curies. In the United States the Federal Radiation Council has set a "safe limit" for humans for whole-body exposure of 0.17 rem per year. Such an exposure would occur with a concentration of about 17 "strontium units" of Strontium-90 in the skeleton. The levels of contamination in caribou bones tested so far are now on the order of 100 to 200 strontium units, far above the level set as "safe" for another mammal, man. In Swedish reindeer contamination with Cesium-137 has reached the order of 25 nano-curies per kilogram, while beef from the same region showed less than 0.1 nano-curie per kilogram.

Dr Pruitt, a biologist, is a specialist in the ecology of northern mammals. He co-operated with the Canadian Wildlife Service in the intensive study of barren-ground caribou begun a few years ago

Radioactive contamination of other northern mammals appears relatively low. Why are caribou and reindeer so high? Here is a neat demonstration of the interdependence of all living things. The answer can be deduced logically and, indeed, was ecologically obvious as far back as 1959. In that year E. Gorham reported in the *Canadian Journal of Botany* that lichens showed abnormally high radiation counts. Later work by a number of investigators has confirmed Gorham's findings. Moreover, the northern plants that rank next to lichens in intensity of radioactive contamination are sedges. What are the two most important caribou foods? Lichens and sedges!

Lichens are subject to radioactive contamination, particularly by fall-out from non-contained nuclear explosions, because of their peculiar physiology. A lichen is

The Cladonia *lichen, commonly called reindeer moss, that is an important caribou food*

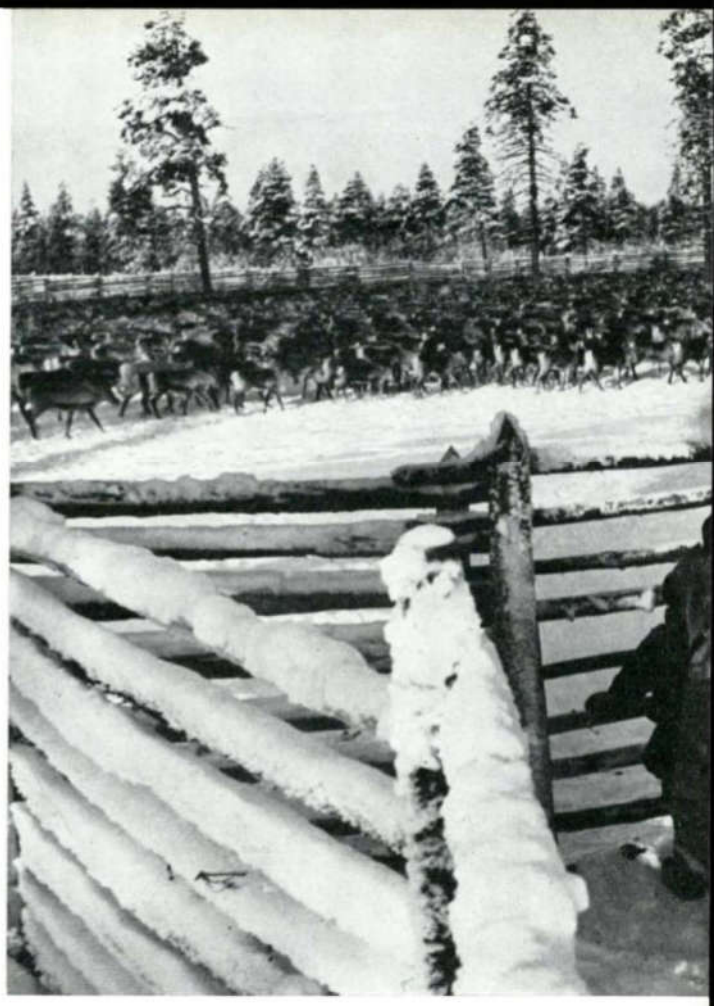
actually a combination of two types of plants—a fungus and an alga. The two live together and together they form a completely different kind of plant—a lichen. This form of life receives its nutrients directly from the air, from dust and other wind-blown material. Thus a lichen feeds on a kind of natural fall-out. In all the eons of time before 1945 it was a harmless kind of fall-out. Now, however, lichens absorb man-made radioactive fall-out along with the natural nutrients. Lichens have evolved such efficient mechanisms for retaining natural fall-out that they also retain virtually 100 per cent of the radioactive particles which fall onto them. Moreover, lichens grow exceedingly slowly. While a blade of grass may contain fall-out particles deposited on it during a two or three month growing season, a fragment of lichen of similar size may contain fall-out particles deposited during many years. Because of their slow growth lichens now contaminated will probably remain "hot" for many years.

The mechanisms whereby sedges are contaminated are not so well understood. It is known, however, that plants from tundra wet meadows generally contain more radioactive material than do plants from other tundra habitats.

Since the caribou is the base of the food chain in the North, turning vegetation into a form that other animals, including man, can utilize, one would expect the entire food chain to be contaminated. Here we run into a paucity of data. What data have been gathered, however, indicate that the entire food chain (lichen / sedge→caribou→ carnivore / man) is indeed contaminated. For example, what few data have been gathered on man indicate that all people who eat much caribou or reindeer meat have higher whole-body radiation counts than people who do not eat caribou or reindeer. Tests for Strontium-90 in a few Alaskans showed that new bone was being formed which had about four times the average United States concentration. Measurements of a few Swedish Lapps showed that they had Cesium-137 concentrations 30 to 40 times as high as the average of the control group from southern Sweden. What the levels of contamination are in relation to details of diet and food-habits and how these levels affect the genetic and somatic attributes of the plants, animals and men concerned is not known. The few published reports from North America have shown a strikingly non-ecological approach to the problem.

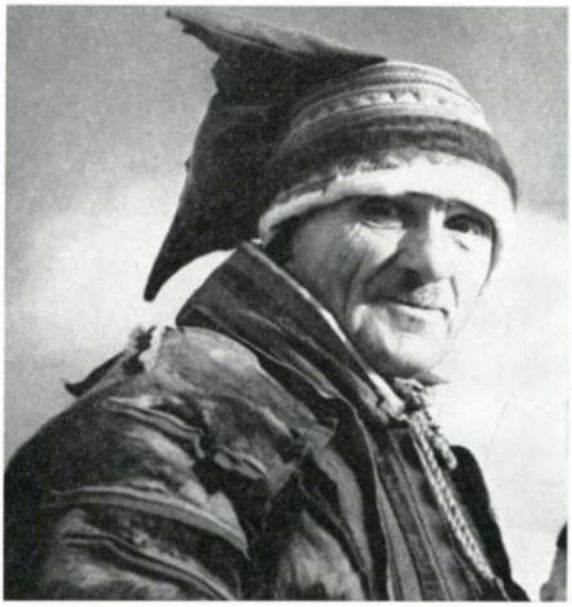
Behind all the reassuring announcements and news releases about nuclear explosions since the beginning of the Atomic Age there has lurked the spectre of the time when the so-called "safe limits" would be exceeded. It is clear that for a great area of the earth's surface that time has now come. The tundra and taiga which now contain such ecologically important "hot spots" comprise about one-fifth of the land area of the northern hemisphere. The human population of the region is relatively sparse and, unfortunately, casts few votes in the world's halls of government. If a "hot spot" of similar magnitude were to develop in relation to peaches, or beef, or milk, or tobacco it seems probable that no reason would be thought serious enough to allow the contamination to continue. ◆

Vitalis Pantenburg who lives in Cologne is geographer, engineer, author and photographer. His special interest is polar research and he has made extensive trips in Scandinavia, Iceland, Greenland and Canada



LAPLAND REINDEER ROUND-UP

by Vitalis Pantenburg



Tuuri is one of the experienced Lapps who taught Canadian Eskimos how to herd reindeer.

Poro-erotus—the collecting and counting of the half-wild arctic reindeer—is a big event in the life of the Laplanders, who are Europe's last true nomads. Once a year the reindeer herds, which number several thousand head, are gathered at certain round-up points where they are driven into large corrals. Here the total size of the herd is determined and the number of animals owned by each member of the community is recorded. The rest of the year the herd roams the tundra under the watchful eyes of the tough, experienced herders.

From great distances the Lapp families come to the meeting place in *raiden* or pack-trains, domesticated reindeer drawing their sleds, the boat-like *pulkkas*. The people are happy and full of anticipation for while there is a great deal of work to do there are also opportunities to see old friends, perhaps to find romance, to visit the market place, and for celebrations in which old and young join.

The centre of activity is a great round corral made of heavy posts which can hold more than a thousand rein-

Awaiting the closing of the main gate, back right; until it is closed no one may enter the corral

deer. Once the herders have funnelled the last herd of the district into the compound, the heavy beam gate is quickly shut. Now the animals, accustomed to freedom, move restlessly within the confines of the corral, round and round, back and forth—a great milling steaming mass of grey animal bodies surmounted with a forest of many-pronged antlers. Soon the lariats of the keen eyed herders are flashing over the heads of the animals. Each herder must lasso the reindeer belonging to himself or his employer and the resentment of the animals to this restriction of their freedom frequently leads to violent, sometimes dangerous, struggles between man and beast. Occasionally, if the herder is not alert, the tables are turned and he is forced to the ground inside the corral to fight the wildly rearing deer in the swirling snow. With an unbelievably sure eye the herders can identify the animals of their herd amidst the milling mass by the owner's brand which is notched into the ear of each animal. One by one as the reindeer are secured they are shut into the smaller corrals of the individual owners.

During this scene of confusion in the great corral, the women light big bonfires that they keep burning on the snow. In large copper kettles as black as pitch they cook reindeer meat and brew strong, very salty, coffee. Canadians would find this brew terrible but the Lapps sip

A balky reindeer in harness. When drawing sleds they are driven with a single rein

enormous quantities of the hot invigorating drink with great enjoyment.

Every now and then a leisurely pause is made in the work of the round-up for in Lapland people still take time for this small pleasure. The Lapps will tell you: "The dear Lord gave us time," and add with a grin, "but He never told us to hurry!" Then young and old squat in their colourful costumes round the gay crackling fires, drinking their coffee and eating heartily of the spicy reindeer soup, with great smacking of lips. The marrow in the bones is licked clean as a special treat, and the reindeer tongue is acknowledged to be a great delicacy. Jokes are told and the latest adventure experienced on the long treks with the herds recounted. Most conversation concerns itself with the half-domesticated family reindeer for without this creature of the Arctic to supply their needs in clothing, meat and milk, and transport, the nomads of northern Scandinavia could not exist.

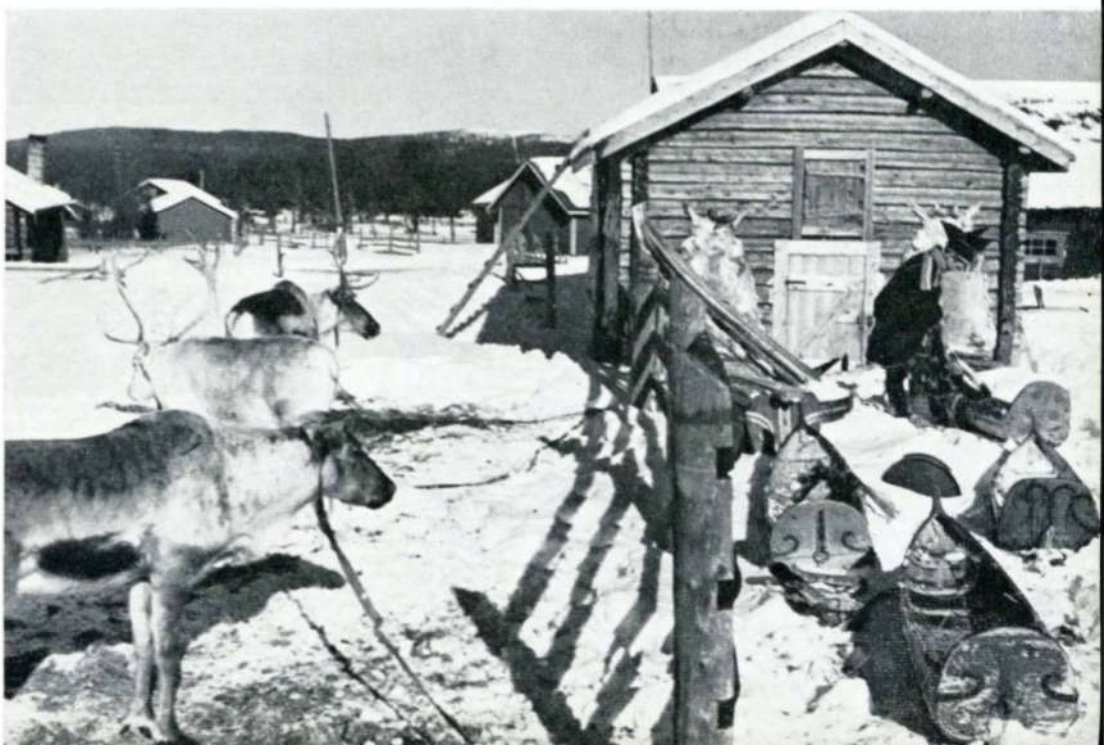
The short days pass quickly and at night the shimmering northern lights dance across the star studded heavens. With the work of *poro-erotus* finished the people set out again for their lonely homes. It will be another whole year before such a meeting takes place again. ♦

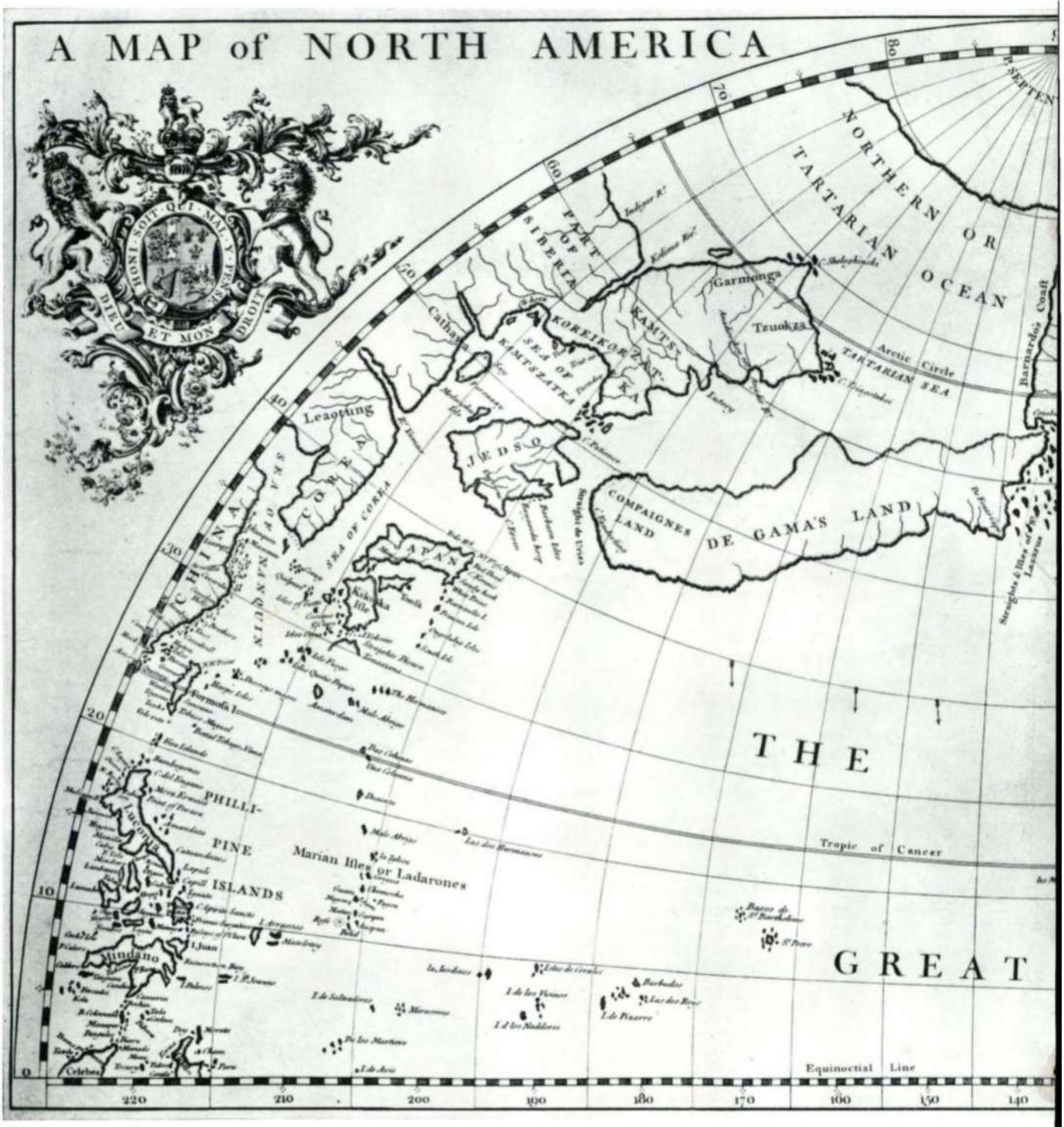
Owners of two of the largest reindeer herds watch critically as herdsmen sort out the animals in the corral

Northern cowboys in action. The conquest of the half-wild animals that are accustomed to freedom is not always easy

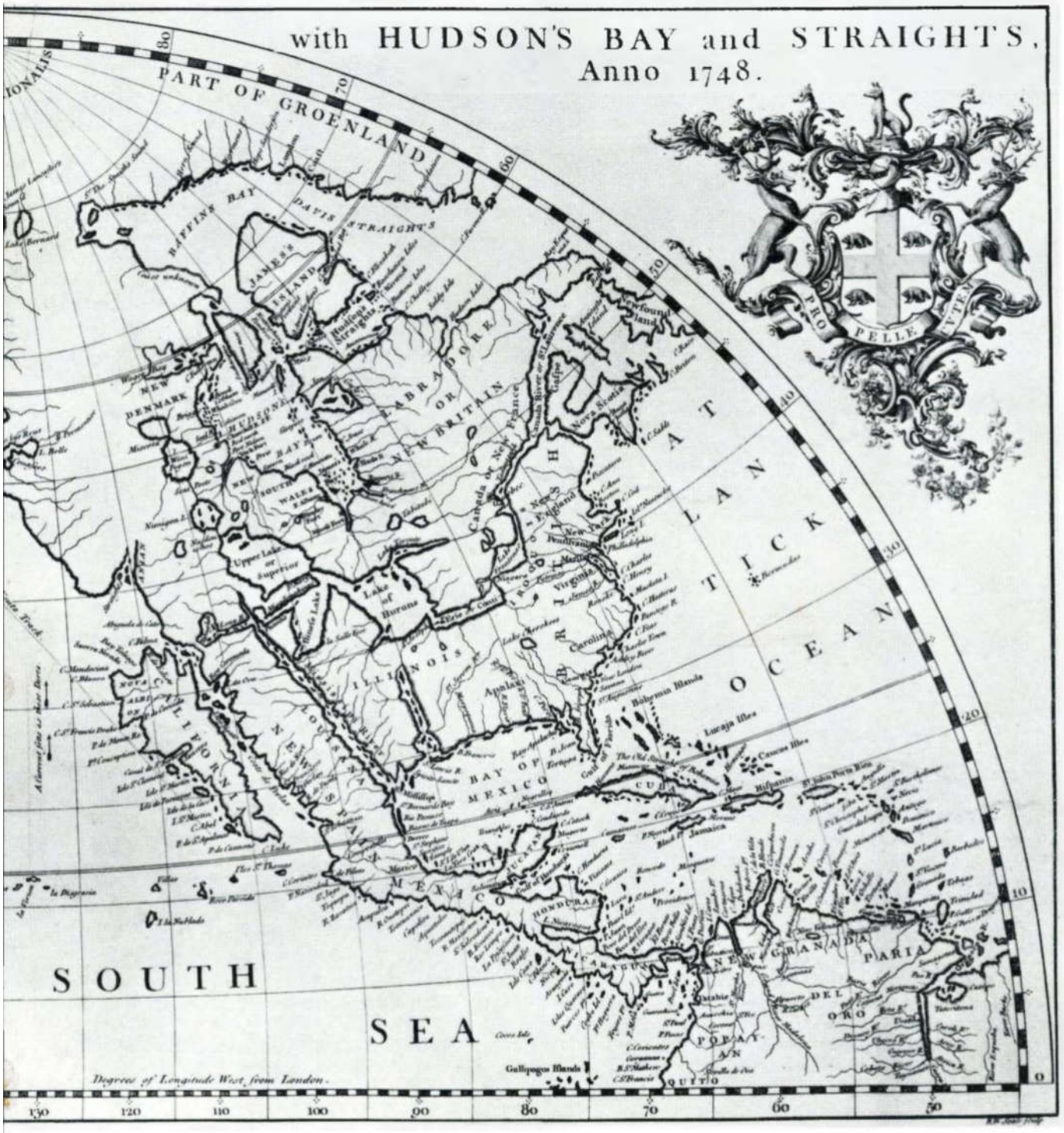
Eemeli does not believe in wasting energy on unconsidered activity. Between meditative puffs at his pipe he says: "It is better to sit down and think for an hour than to work for a week in vain"

Hitching post for the teams of the nomads, with unloaded pulkkas on one side of the fence, reindeer on the other




A MAP of NORTH AMERICA
HONI SOIT QUI MAL Y PENSE
DIEU ET MON DROIT
NORTHERN OR TARTARIAN OCEAN
PART OF SIBERIA
Garmanga
Tzuokzà
KAMTSCHATKA
SEA OF KAMTSZATKA
Arctic Circle
TARTARIAN SEA
Barnardo's Coast
Leaotung
JEDSO
COMPAIGNES LAND
DE GAMA'S LAND
Straights of Vries
Straights of Juan de Fuca
CHINA
SEA OF CHINA
SEA OF COREA
JAPAN
PHILLIPPINE ISLANDS
Marian Illes or Ladarones
Mindano
Celebes
THE GREAT
Tropic of Cancer
Equinoctial Line
80
70
60
50
40
30
20
10
0
220
210
200
190
180
170
160
150
140

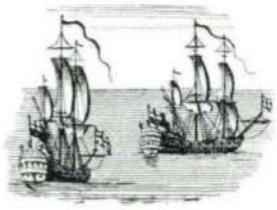
A REMARK



ABLE MAP

BY GLYNDWR WILLIAMS

Lecturer in history at Queen Mary College, University of London, Dr Williams is the author of "The British Search for the Northwest Passage in the Eighteenth Century" published this year



A REMARKABLE MAP

AMONG the valuable collection of maps and charts in the archives of the Hudson's Bay Company at Beaver House, London, are nine copies of "A Map of North America with Hudson's Bay and Straights" engraved in 1748 by Richard William Seale. The map, a handsome production measuring 32½ inches by 17 inches, with highly decorative versions of the Royal Arms and the Company's coat of arms in the upper corners, provides an excellent illustration of the tendency (still general in the eighteenth century) for maps to be constructed not only as a method of representing known geographical data, but also as a means by which the geographical theories of the day—sometimes based on the scantiest of evidence—were depicted and publicized. To some cartographers and to many of the map-buying public a blank space on a map was an admission of failure. The islands, rivers, straits, even continents, which were shown in unexplored regions might in the end prove to be imaginary, but for the moment they made the map attractive in appearance and controversial in content, and often helped it to sell more quickly than the works of less inspired cartographers.

But even in an age when maps of bizarre appearance (as well as many of high technical skill and scholarship) were being published, the Seale map was altogether exceptional in the number and extent of its errors, some of which were inexcusable by 1748. Although most of North America west of the Great Lakes was still unknown, maps were available in England and France showing the correct position and size of the most important geographical features of the eastern half of the continent. On the Seale map many of these appear misplaced in position and distorted in form: the western end of Lake Superior lies in the same longitude as southern California, Florida is six hundred miles east of its true position, Lake Huron has swollen to a disproportionate size, New Brunswick has changed into an island, and the Mississippi is shown as a wide seaway running inland from the northwest corner of the Gulf of Mexico. Confronted with errors as flagrant as these in regions which were reasonably well mapped by this time, criticism in detail becomes pointless, and the map would hardly be worth further consideration were it not for the intriguing features which appear in the unexplored regions farther west.

There, geographers had a clear field for speculation. In the absence of reliable exploration they were inclined to accept rumours and legends as substitutes for factual information, and some of the erroneous conceptions which appear on the 1748 map had been current for a considerable time. That California was an island was a conviction still held by many cartographers, while on the mainland opposite the northern tip of California traces of Lahontan's fictitious geography can be discerned in the Long River and the lake Tahugtuk, which are shown connecting with the Mississippi, and separated from the Great Lakes to the east and the Pacific to the west only by narrow land-bridges. This notion was one particularly favoured by the French, obsessed with theories of a River of the West which it was hoped would lead to the Pacific, although the system of rivers and lakes on the Seale map also bears some resemblance to that portrayed in Daniel Coxe's *Description of the English Province of Carolana*, where the author related English, French and Indian accounts of the geography of the far west, and went on to describe "the Probability of a Communication by Water (except about half a Day's Land Carriage) between the River Meschacebe [Mississippi] and the South-Sea." Nor does it come as a surprise to find a Strait of Anian marked on the map north of California, for this was one of the oldest and most tenacious of geographical myths. The strait first appeared on a map as early as 1566, when it was shown approximately in the position of the modern Bering Strait, but by the late seventeenth century geographers had moved it to the south, and it was normally shown as an opening on the northwest coast of America near latitude 50°N., pointing in an indeterminate fashion towards Hudson Bay.

Up to this point the ideas expressed on the 1748 map can be traced back to the works of other geographers; but in his representation of the coast north of the Strait of Anian the cartographer owed nothing to earlier maps, and instead relied on the recently published narrative of one of the most influential of those apocryphal discovery voyages which for centuries bedevilled the course of exploration—that alleged to have been made by the Spanish Admiral Fonte in 1640 along the unknown northwest coast of America, and inland through a network of waterways towards Hudson Bay. The first account of the voyage appeared in 1708 in an English periodical, *The Monthly Miscellany*, but the report attracted little attention until it was rediscovered thirty-five years later by Arthur Dobbs, economist, geographer, and unremitting critic of the Hudson's Bay Company, who in 1744 printed it in his *Account of the Countries adjoining to Hudson's Bay* as evidence of the fact that there was a Northwest Passage through Hudson Bay to the Pacific. From that time forward Fonte's voyage formed a stormpoint of geographical controversy, until the explorations of Captain Vancouver near the end of the century finally demolished the myth. It has been generally supposed that the first representation of Fonte's discoveries in map form appeared in 1750, when the French geographer Philippe

Buache presented a manuscript map embodying them to the Académie Royale des Sciences in Paris. The map, entitled "Carte des Nouvelles Découvertes au Nord de la Mer du Sud," was published in 1752, and was followed by a host of imitations; but there are at least two earlier maps. In 1749 "A Chart for the Better Understanding De Font's Letter" was inserted in the second volume of T. S. Drage's *Account of a Voyage for the Discovery of a North-West Passage*, while on the Seale map of 1748 "De Fonts Track" is clearly marked, and the place names along the coast north from Anian as far as the absurdly misplaced Lancaster Sound are taken from the Fonte account ("Barnardo's coast" indicates the route followed by one of the admiral's captains). Although the outline of Northwest America on the 1748 map differs from that shown on the maps of Buache and other cartographers of his school in that the influence of the Fonte discoveries is confined mainly to the coast, and there is no attempt to show a system of inland seas and straits penetrating far into the interior, the basic features of Fonte's account all appear.

Nevertheless, the most striking feature on the map is undoubtedly the huge island, thousands of miles long, stretching across the north Pacific, and named De Gama's Land. Separated from its western tip (Compaignes Land) by a channel is another large island, Jedso, lying between Kamchatka and Japan. These lands represent, like the Strait of Anian, one of the most persistent geographical fictions of the period, as bewitching to cartographers as the rumours of the great fertile continent situated somewhere in the south Pacific. In the middle of the sixteenth century Jesuits in Japan learnt of a land to the north called Jedso, while some years later a rumour spread that a Spanish vessel had been driven to another island four hundred miles east of Japan where precious metals were so common that even domestic utensils were made of gold and silver. At the beginning of the seventeenth century a Portuguese navigator, Joao da Gama, was alleged to have discovered land in the north Pacific; and in 1649 the commander of a Dutch East India Company ship claimed to have sighted Jedso, and also part of the American continent, which he named Company Land. The confusion caused by these vague and unauthenticated reports was only too apparent on maps of the north Pacific, on which geographers strove to reconcile the various accounts, sometimes showing Jedso, Company Land and Gama Land as islands, sometimes as parts of America or Asia. One of the objectives of Bering's second expedition, which sailed from Kamchatka in 1741, was to discover whether these lands did in fact exist, and in searching for them Bering's two ships deviated far from

Detail of the 1748 map showing the northwest coast of America from the Tropic of Cancer to misplaced Lancaster Sound

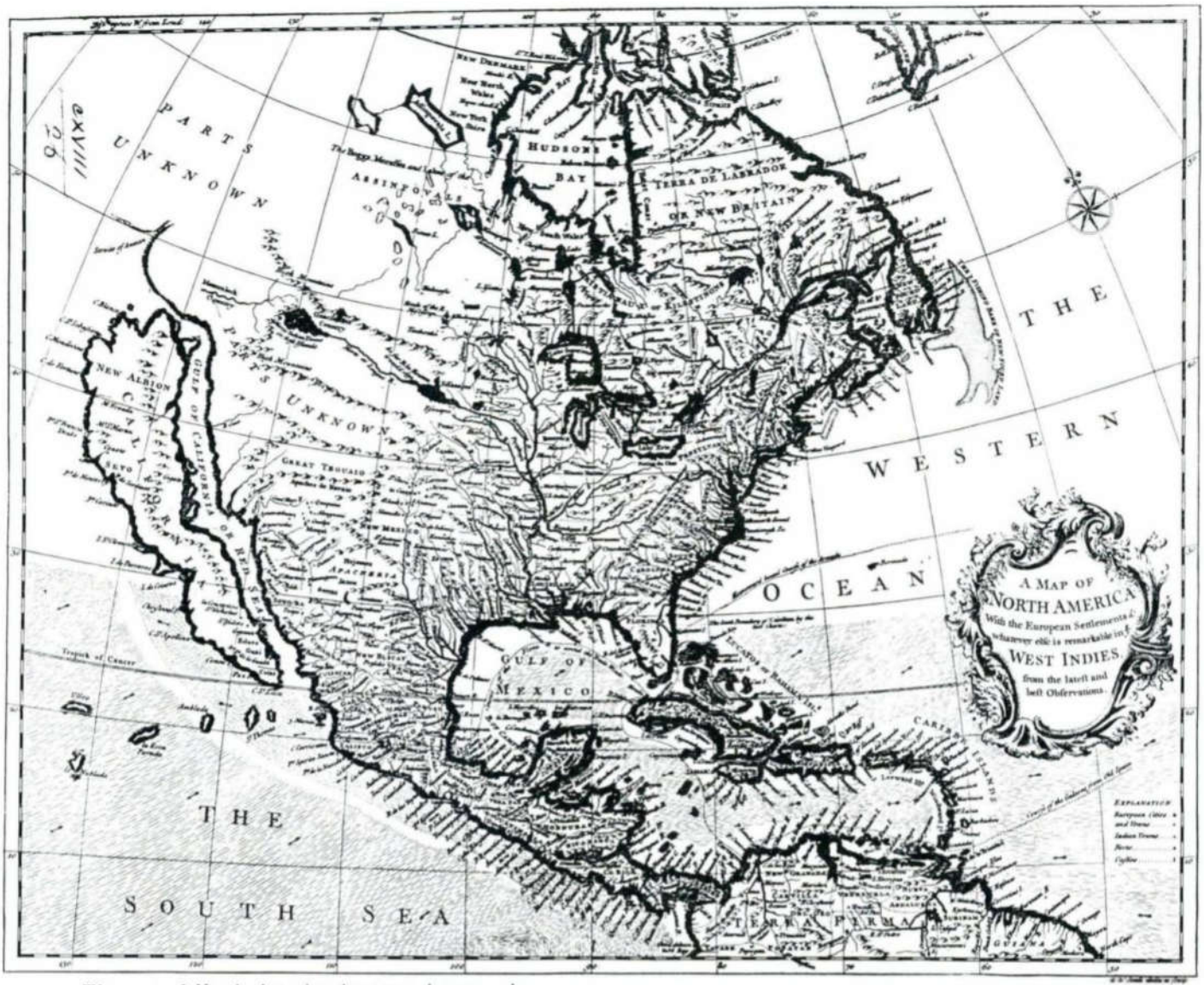
their direct course to the northwest coast of America, and eventually became separated with disastrous results. Explorations by another section of the expedition under Spanberg finally determined that the lands in question were either small islands in the Kurile chain or nonexistent, but although garbled reports of the Russian explorations soon reached Europe no official information was released until the 1750s, and the fabulous lands of the north Pacific, soon to vanish from the maps forever, appeared on the Seale map in their most exaggerated form.

The map of 1748, then, embodies many of the myths and fantasies of centuries of speculative geography; and it is the more frustrating that one cannot be certain of the identity of its designer, nor even of the reason for the issuing of this curious piece of cartographical nonsense under the auspices of that most sober body of businessmen, the "Governor and Company of Adventurers tradeing into Hudson's Bay". That the Hudson's Bay Company commissioned the map there can be little doubt. Entries in the Committee's minute book and financial ledgers record that on 11 October 1748 the payment of £13-15-0 to Seale "for engraving Copper Plate" was approved, and that on 30 March 1749 a further £2-12-0 was paid to him "for Engraving a Copper Plate of the Bay and Printing 200 Impressions thereof". What the entries do not reveal is whether Seale drew as well as engraved the map, whether, that is, he was responsible for the conceptions expressed on it, or merely engraved the copper plate from a drawing supplied to him by the Company. There is no note in the Company's records of money being paid to another cartographer for drawing the map, and the logical inference is that Seale or a member of his staff undertook its entire production.

By this time Seale was well known both as an engraver and as a cartographer. One of his earliest tasks had been to assist in the engraving of Popple's celebrated "Map of the British Empire in America" in 1733, and during the next forty years he drew and engraved hundreds of maps for periodicals, histories, and collections of travels. He also engraved many individual maps, including Christopher Middleton's map of Hudson Bay in 1743, and it was perhaps this work which first brought Seale's name to the attention of the Committee. However, examination of these maps throws some doubt on Seale's responsibility for drawing that of 1748, for he usually (though not invariably) followed normal practice in inscribing "delin. et sculp." after his name in the bottom right-hand corner of any map which he had drawn as well as engraved, whereas on maps which he had engraved from another's drawing the inscription ran "R. W. Seale sculp.", as on the map under discussion. The distinction between the two types of work is well illustrated on Seale's maps for Anson's *Voyage round the World*, published in 1748. The map of the world opposite the titlepage has "R. W. Seale del. et sculp.", but the detailed charts and plans which also appear in the volume, and are based on sketches made by officers during the voyage, are simply inscribed "R. W. Seale sculp."

Of the other maps issued under Seale's name in this period the one which affords a particularly interesting comparison with that of 1748 is his "Map of North America with the European Settlements and whatever else is remarkable in ye West Indies, from the latest and best Observations", which appeared in the third volume of Tindal's *History of England* in 1744. There are some similarities between it and the map in the Company's archives: California is shown as an island, the Strait of Anian is marked in shadowy fashion on the northwest coast near latitude 50°N., and much of the western geography is imaginary, with Lahontan's Long River prominent. But in general the map is little different from most others of the day. Although it reveals some faulty conceptions in unexplored regions it has none of the outrageous errors of the 1748 map, and it is difficult to believe that the same cartographer was responsible for constructing both maps. That of 1748 even has an inaccurate representation of Hudson Bay, the area of most concern to the Company, whereas Seale's outline of the great bay on his 1744 map was based on the chart he had engraved for Middleton the year before, and was as correct as could be expected at that time. It is almost impossible to accept that a technician of Seale's reputation committed the crude errors of the 1748 map; yet the obvious course for the Company to have followed would have been to entrust so experienced a cartographer with the drawing *and* engraving of the map. If another cartographer was commissioned, it is hard to understand why his name does not appear on the map, and why there is no record of payment being made to him.

Although the authorship of the 1748 map is a riddle which will probably never now be solved, the events of the period make it possible to theorize rather more confidently about the reason for the Committee's order of so many copies of a map of North America. The years 1748 and 1749 saw a full-scale attack launched against the Company in England by Arthur Dobbs and his merchant associates on the grounds that it had not fully exploited the vast area granted it by the charter of 1670, and that it had neglected to search for the Northwest Passage. In 1748 a petition to the Privy Council asked that Dobbs's North West Committee should be incor-



The map of North America drawn and engraved by R. W. Seale that was published in 1744

By courtesy of the Trustees of the Britsh Museum

porated into a company trading to the Hudson Bay area, and when this was rejected the matter was taken to Parliament, which in March 1749 set up a committee to investigate the whole subject of the trade of Hudson Bay. The chronology of this crisis in the Company's affairs is important in relation to the Seale map. The minute book shows that by October 1748 the copper plate engraved by Seale was finished, but not until March of the following year is there any indication of copies being made from it. The most likely reason for the commissioning of the map in the first place is that the Committee had in mind some kind of campaign in defence of its interests, for which a map of its territories would be useful. Since the arbiters in the dispute between the Company and Dobbs throughout 1748 were the Attorney General and the Solicitor General, who were ordered by the Privy Council to report on Dobbs's petition, a publicity campaign would hardly have been appropriate while they were considering the issues involved; but in the spring of 1749, with the Company's affairs being given increasing attention as the new attack on its monopoly developed, petitions to the House of Commons against its charter being prepared, and fiercely critical pamphlets coming off the printing presses, the Committee decided that the time had come for positive action. At a meeting on 10 March 1749 "It was thereupon Resolved and Ordered that Mr. Sharpe do forthwith prepare a State or Case proper to be given to the Members of the House of Commons on Behalf of the Company" and within a short time Joshua Sharpe, who was the Company's solicitor, had produced a terse, effective piece of reasoning, *The Case of the Hudson's-Bay Company*. By

Detail of the 1748 map engraved by Seale, showing the Hudson Bay and Strait area

the end of the same month Seale had run off two hundred copies of his map, and it seems probable that they were intended to be sent to selected Members of Parliament with Sharpe's pamphlet, perhaps with the boundaries claimed by the Company against the French marked on them in colour (as on two of the copies in the archives).

That the Company at this critical moment in its history could find good use for a map of its territories can be readily granted; what remains incomprehensible is why the Committee, shrewd and businesslike, allowed this particular map to be produced and issued under its coat of arms. It was at once inaccurate and speculative, a product of that school of theoretical geography against which the Company was fighting at this time over the question of a navigable Northwest Passage. A pamphlet written by Dobbs early in 1749, in which he expressed ideas about the Pacific coast of North America similar in some respects to those shown on the Seale map, is still in the archives with highly critical comments scribbled in the margin by one of the Committee members. Thus, when Dobbs enlarged upon the possibilities of finding "rich, civilized Nations, near or upon the Coast of the Western [i.e. Pacific] Ocean," a deflating marginal note added, "When the Sky falls a great Number of Larks may be catched"; and this practical, almost derisory note was typical of the Committee's attitude towards the theories of the speculative geographers. As far as the Seale map is concerned one can only surmise that no member of the Committee saw the map until Seale delivered the two hundred copies in the spring of 1749, and if this was so, then it is possible that the original intention (as argued above) of sending out copies of the map with Sharpe's pamphlet was dropped.[1] The discrepancy between the title of the map and the actual area shown on it adds weight to the supposition that the cartographer had been given the title by the Committee on the assumption that he would produce a "standard map" of North America for the Company's use, and that during the rush of business which accompanied the Dobbs crisis the Committee had not approved, nor even seen, the drawing on which the engraving was based.

Whether or not the Committee distributed the copies Seale made for it in 1749 one point seems certain—it had no very high opinion of the map. It is not referred to again in the Company's records of the period, and when in 1750 the Committee was asked to submit a map of the Company's territories to the Board of Trade and Plantations it sent, not one of the spare copies of the 1748 map, but a map drawn for it that year by James Mynde. The Seale map disappears from view: it exerted no influence, was never imitated, caused no controversy.[2] It lies now in the Company's archives, a forgotten example of eighteenth-century speculative geography, and a reminder of a baffling episode in the Company's history at a time when the characteristics of its policy were caution, prudent judgment, and a certain degree of robust scepticism—qualities notably absent from the fascinating but preposterous map of 1748. ◆

1. In connection with this point it would be interesting to learn whether any copies of the map exist today outside the Company's archives and one copy in its Winnipeg headquarters. The only one known to the present writer is in the British Museum, and that was presented by the Hudson's Bay Company as recently as 1957; yet, if the Committee indeed sent out most of its two hundred copies in 1749 a few at least would be expected to survive, and their location might throw light on this question.

2. The map does not seem to have appeared again until 1878, when the Company sent a copy to the arbitrators "of the Case of the Province of Ontario respecting the Westerly and Northerly Boundaries of the Province." A small-scale reproduction of the map was included in Sir William Schooling's short history of the Company, *The Governor and Company of Adventurers Trading into Hudson's Bay during Two Hundred and Fifty Years 1670-1920*, published in London in 1920.

Initiation of a northern teacher

BY ANN STACEY

A COW mooed somewhere distantly in the starlit night and, startled, I exclaimed that in truth I thought it had assuredly been a cow.

"Of course it was a cow!" the lady replied, shrugging her shoulders under the red fox collar. "What did you expect? A reindeer? We're not at the Pole, you know!"

My matronly companion and I were sitting on a log while nearby the three men were trying to extricate our taxi from a mudhole. The owner of the cab, a young ruffian with badly decayed teeth, ran an erratic taxi service between Peace River and Fort Vermilion. We had left Peace River town about two o'clock in the afternoon and had had fair going on the northbound gravel highway. When we reached the forty-mile cut-off to the Fort, we found heavy rains had washed out the road in several places and we had been forced to make detours on stump-studded logging roads. We were on one at about three in the morning when we found ourselves high and dry on a stump, our front axle in a morass of gumbo.

Three of the passengers, my lady friend among them, were going home after brief trips to the "outside" on business, pleasure, or for a new fox collar. I was bound for my first school and I do not know what I expected there in the early hours of that morning thirteen years ago surrounded by towering trees and aching silence. Certainly nothing so prosaic as the mooing of a cow.

With the detours and a further delay of a sleeping ferryman, that taxi trip took nineteen hours, bringing my travelling time from Edmonton to the Fort to three days. Each preposterous delay, which would annoy me now, only increased my delight in this new experience. For I was eighteen and after obtaining my certificate to teach I had asked to be sent to the most northerly school in Alberta. Obligingly, I was given a school that had been closed for several years in a Métis settlement near Fort Vermilion.

A strange thing this, the love of a country. For I had loved the north before I even knew it, had felt its appeal in the verse of Robert Service and Charles G. D. Roberts, the tales of Jack London, and James Oliver Curwood, the music of Grieg and Sibelius, the paintings of Tom Thomson and Emily Carr. And I still think it is the most beautiful country in the world—the most exciting.

Stoney Point school would have justified the misgivings of my southern friends. A gaunt ancient building of clay-streaked weathered logs, it was set in a small clearing, its yard overgrown with pigweed, goldenrod, and fireweed. The inside was even more desolate. A huge cast iron Hudson's Bay heater dominated the room, its stove pipe hung precariously across the ceiling in a web of wire. The only other furnishings were the rows of

Mrs Stacey, a former teacher, is now living in Germany

scarred desks, a pale grey blackboard, and a motheaten Union Jack. I adored it. It was mine.

My teacherage was nearby. A log building, uninhabited for years, it was a study in monochromatic grey. The interior was papered with long sheets of grey building paper that flapped and fluttered against the logs whenever the wind blew. I drew large pictures on the walls of leaping deer, galloping horses and a bikini-clad girl. They brightened the two small rooms. Later when the cold kept me indoors my visitors and I used them for target practice. The girl proved to be the most popular target, perhaps because she gave us a range of some sixteen feet.

I ordered what school books were available, collected my trunk that the Hudson's Bay boat had brought to Fort Vermilion, did my grocery shopping, a weird supply, and moved with the help of a neighbour and his vintage model truck the eight miles out to my hermitage. That weekend I settled in. It was no mean feat. I carried my water from a quarter of a mile away since I had no well. There was no wood supplied so I dragged dry fallen poplars from the nearby woods, sawed them into stove lengths and split enough for kindling. I cleaned house on a ration of water, hung makeshift curtains, propped my three-legged stove level with an oil can and initiated myself into the intricacies of cooking a meal, a skill that until then I had not acquired. Then I spent hours working out an elaborate timetable that would see me through that first frightening day at school.

They came that morning, slipping into the long-disused schoolroom, blackhaired, shy-eyed, shining with anticipation, anxiety and sun. I was amazed at the number of them and astonished at the size of some. I am five-ten in moccasins but there were some there that morning who were taller than I and some who I am sure were older. There were over forty in all, half of whom were beginners. They doubled up at the desks and stood quietly at the back of the room until benches were improvised. When I at last addressed them I was stern in my fear of them and they were completely unresponsive in their fear of me. When I sought some support from the back of my chair it came off in my hand. There was one moment of dead silence before we all dissolved in relieving laughter. So we relaxed and the school year began. It never again became formal.

I was not a good teacher. I am a lax disciplinarian (even with my own) and in my first school I made a pal of every pupil. They even passed notes to me! At recesses and noons we talked endlessly. After school the faithful would accompany me home to help me haul wood and saw it. They taught me to smoke. They called for me in the morning and sometimes we took my phonograph to school and listened to music. We took long hikes, wad-

ing through sloughs, eating berries and arguing over the identity of bird and animal tracks. I was not a good teacher (though they insisted I was the best they ever had) but for the most part they were good pupils. We had no library so the lessons I taught were mainly from memory. They absorbed it all and remembered. Once I said squid were a delicacy when I intended to say shrimps. When I came to a lesson on Newfoundland (it was in 1949 when the colony became a Canadian province) and I mentioned the squid-jigging grounds they all reminded me that since squid were so good to eat it was a shame to waste them as bait. No teacher can fail completely with such eager minds.

Each pupil was expected to buy certain texts, work books, and other materials but since they were four or five to a family in school who among us could afford such an expenditure? Certainly not those whose income came from traplines, and certainly not I whose monthly stipend came to $114. I bought pencils. Dozens of pencils. Each evening I collected every stub and redistributed them in the morning for if a pencil left the schoolroom it was never seen again.

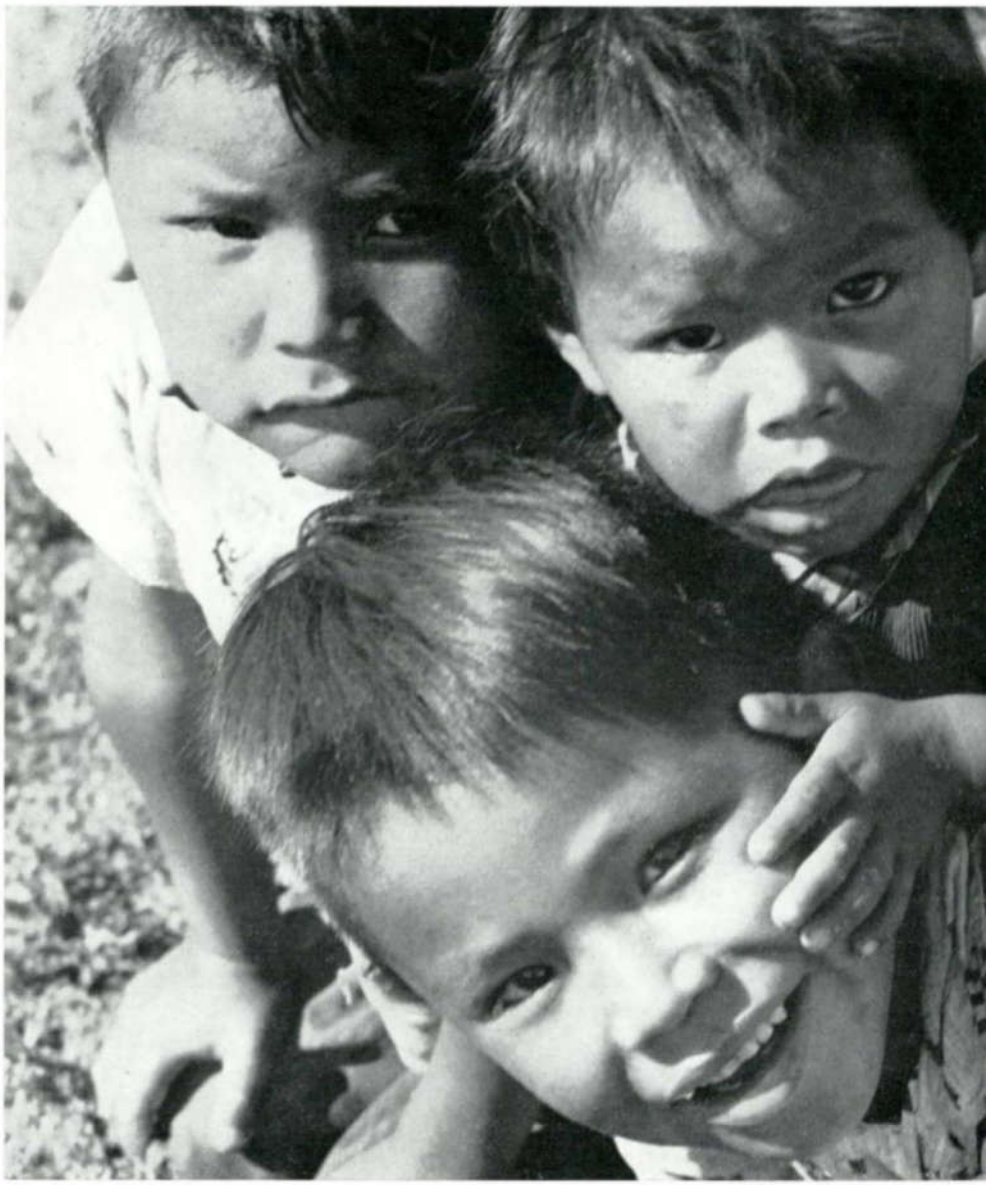
Had I been a good teacher I should have demanded all these accoutrements of study from the school board since there was no other way of getting them. Had I been a crusader I should have brought a long list of necessities before the people, the superintendent, the minister of education, himself. Had I been a voice crying in the wilderness, I should have demanded these things and more; wood, water, and a roof over my head that did not threaten my early demise by exposure. Frankly, it never occurred to me. At that time I was grateful—they had given me a school, a wonderful great, grey pioneer school. By the same reasoning, how could I scold my children who were so warm and gay and full of mischief.

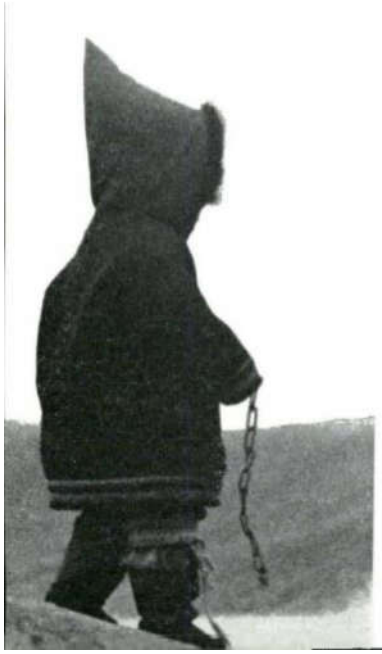
With the approaching cold weather, more and more of my time was dedicated to my own survival. What to eat was a problem since learning to cook by trial and error is a costly experiment. Since I could shop at best but once a month, when my farmer neighbour made the trip to town, I was always out of supplies. Once I was reduced to a diet of cornflakes (with water), coffee, and raisins. I bought eggs from the farmer but I loathed eggs and used them mainly in a fluffy concoction of whipped egg-white, sugar and water, a cake frosting I remember my mother making. One evening the mother of five of my school children dropped in as I was having "supper." I invited her to join me in a cup of coffee but I shrank from offering her any seven-minute frosting. But she was an observant soul and after a tactful interval of some days she sent me a pan of bannock—marvellous stuff.

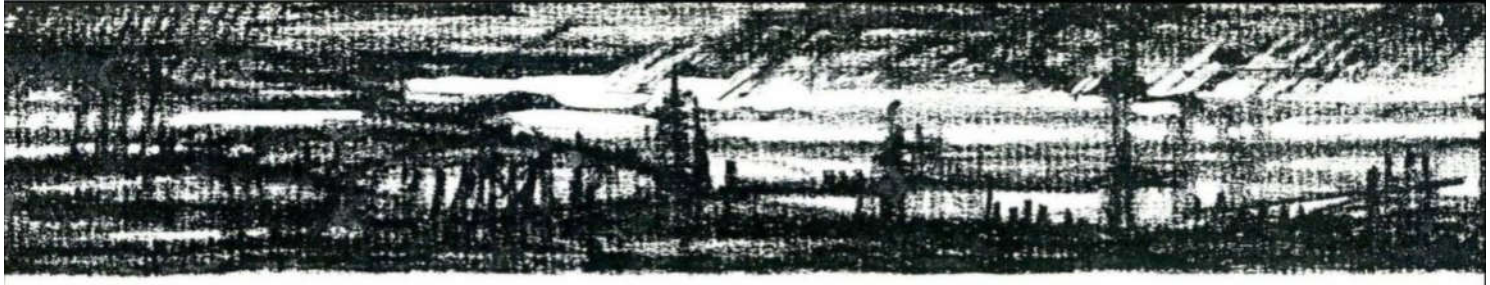
Once when the cupboard was bare I set out for the Fort on foot but the sixteen-mile walk, half of it carrying a big bag of supplies, proved so exhausting I vowed never to do it again. Later, I acquired a .22 and bagged a few prairie chickens to augment my tinned diet. Since I could not clean them, for the gore undid me and, in truth, I was afraid I should not remove everything that needed to be removed, I would take them to the farmer whose wife was happy to prepare them and invite me to supper. As the winter became fierce (it reached 68° below zero at one point) the birds became scarce. I brought my .22 to school and the children who sat near the windows had instructions to keep a sharp lookout for prairie chickens or partridges landing in nearby trees. When the call went up I would try to pick off a few from the school house steps with everyone at the windows giving colourful comments on the quality of my aim. If I got any, whoever was in special favour for the day was sent to retrieve them. This went on happily until a note arrived: "Plees teechur don tak your gun to skool." It was, by all standards, a reasonable request. The gun's barrel split one day shortly afterwards anyway so it was back to a low-protein diet. When I returned to Edmonton the following June I found to my delight I had lost twenty-five pounds.

Shortly before Christmas I managed to get a couple of loads of wood hauled and sawed so my evening chores were practically eliminated. There was soon plenty of snow to fill all my water requirements, my shanty had its logs freshly chinked and so I achieved a degree of coziness. In the orange light of my coal oil lamp, the frost-thickened windows hemming me in from the snow and ice, fires crackling merrily in my two stoves, the coffee pot walking on the range, and an American radio station coming in loud and clear, what could be more delightful? Then there was the prospect of friends dropping in, perhaps a ride by dog team over frozen trails, a rail walking contest with some of the children, or a session of homemade music. It was a year lived back in history for such were the simple unsophisticated pleasures of the early Americans and Canadians. I wonder if it is the same now that all those children are grown? I suppose prosperity has reached even this isolated district and organization has spelt the end to its simple spontaneity. For no place is as isolated today as it was even so short a time as thirteen years ago. But the Peace still slips silently over the shifting sandbars. And even as I write this, far away in Europe, the northern lights whip in brilliant sheets over that vast land and over the crumbling relic of Stoney Point that I knew for three years as my first, my most beloved school. ◆

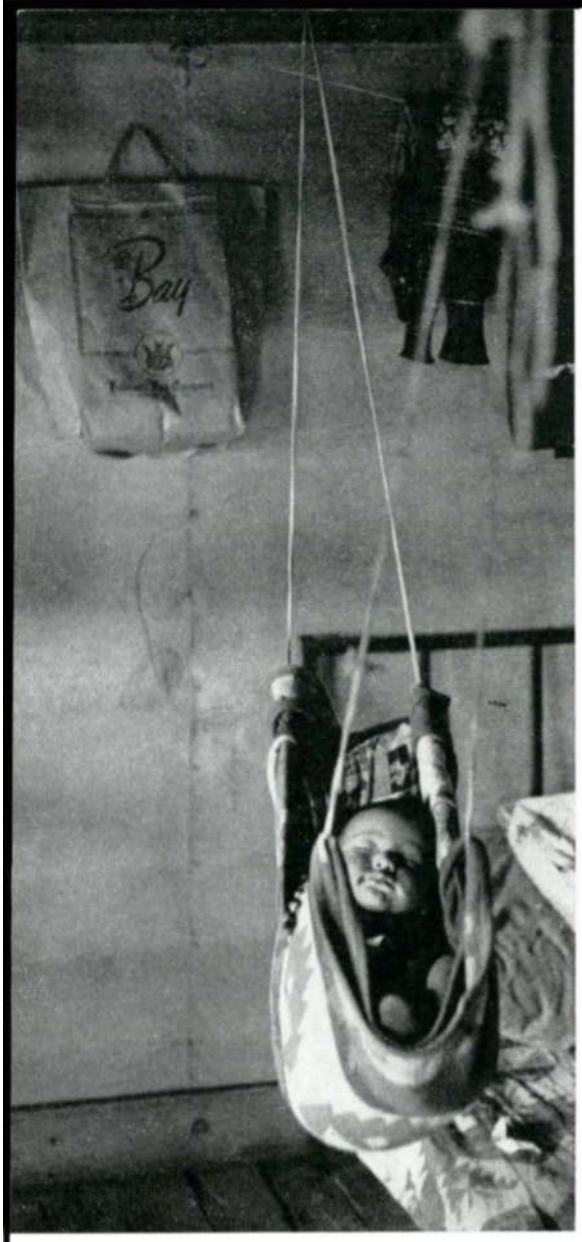
Children in the North



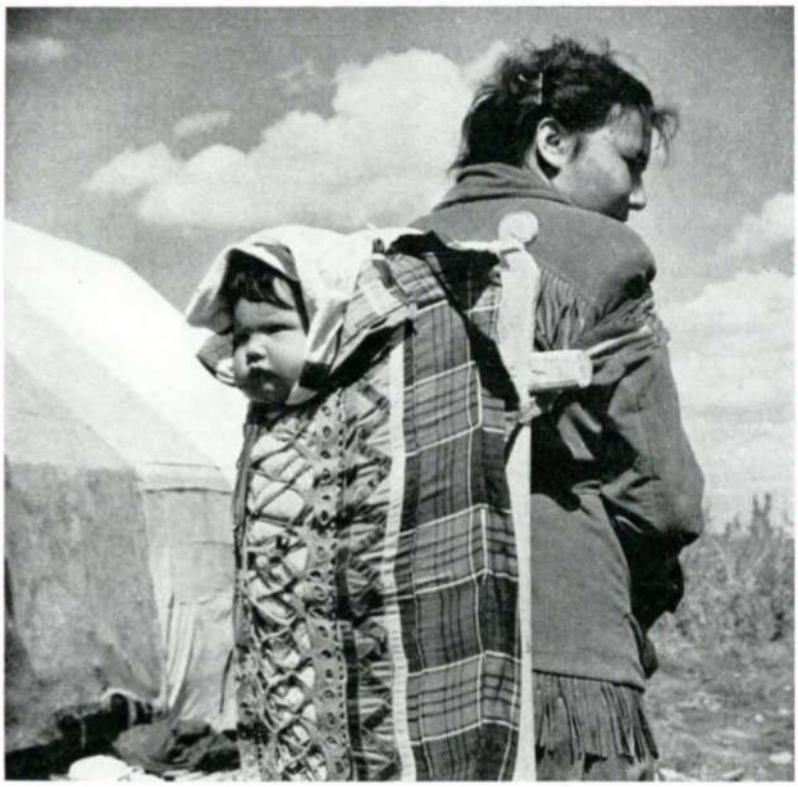




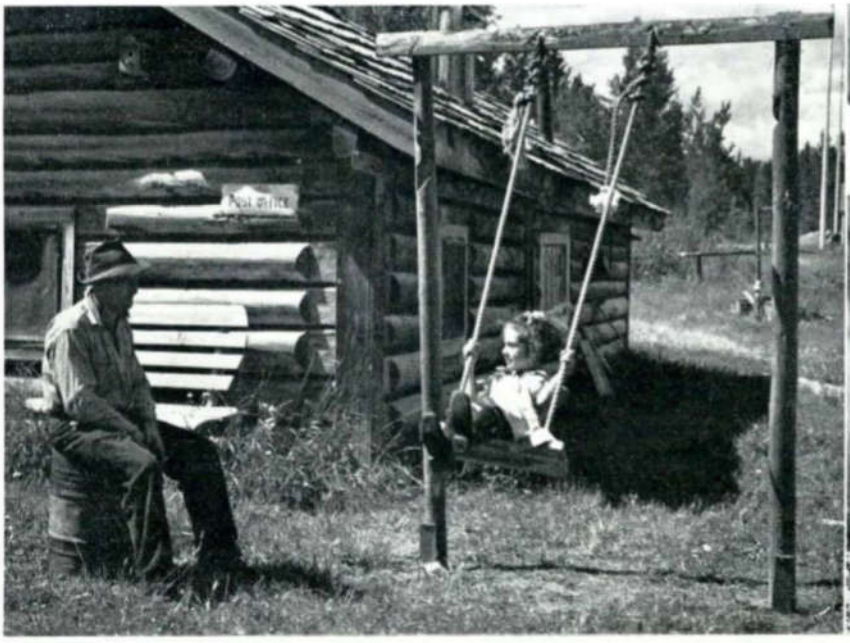
In northern Canada there are children of three races, of Eskimo and Indian and European descent. Some live in isolated groups in harsh country, some mingle in old or new settlements, some come and go. They are friendly or shy, suspicious or boldly enquiring, but they have no prejudices until these are implanted in them. Here are pictures, taken in their distant homeland, of some of these northern children, who may no longer be remote by the time they are grown up and who will inherit a world for which we, their elders, are all in part responsible.

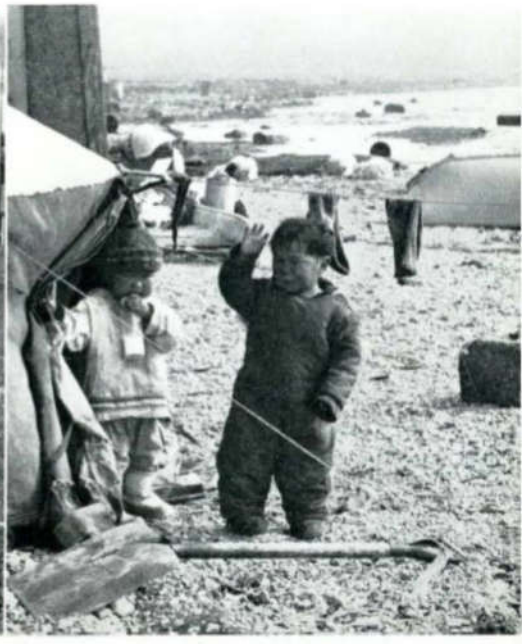


A baby will sleep as well in a hammock made of a blanket folded between two ropes as in a crib adorned with silk and lace. It will take the air serenely in a trundled pram or snuggled in the back of a parka, or laced in a moss-bag carried on a cradle-board on its mother's back or propped against a wall.

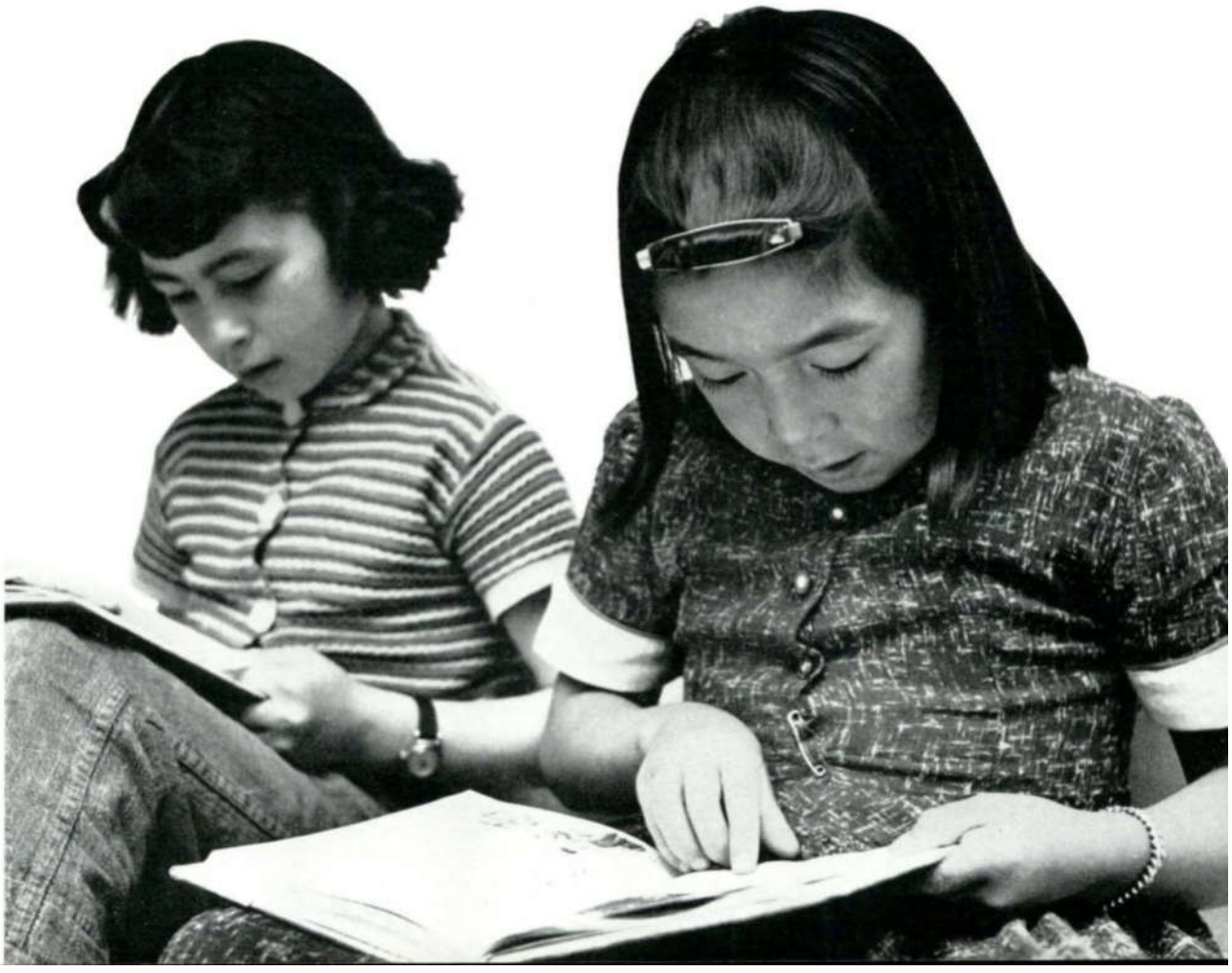


Pets have universal appeal, whether they be squirrels, rabbits, birds, or dogs. There are many dogs in the north, some that are just pets, but more often they are working dogs, hunting dogs or the strong necessary animals that haul a sled or toboggan over snow and ice and in summer can carry panniers or pull a small loaded travois when their owners move.

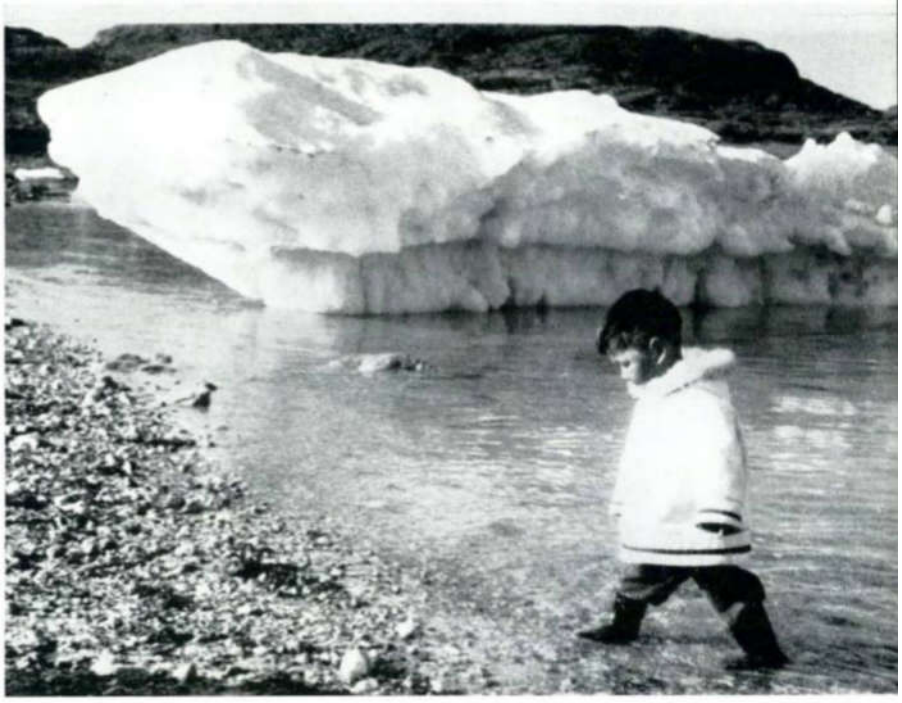




There are many facets to childhood but the essentials vary little whether the children face the world in sophisticated city surroundings or amidst arctic snows or forested mountains. Common to all is the need for affection, love of parents, companionship of friends; the mastering of a language, or two languages; play to develop bodies and minds; training to live among their fellows, to conform or adapt; education, that they may communicate with others, share in the wisdom of past ages, and acquire the knowledge that will equip them to cope with what the future may offer and add grace to life. Theirs is the excitement of exploring a vast unknown world and theirs are the hopes and fears, the anticipation and disappointments, the triumphs and frustrations that are felt so acutely.

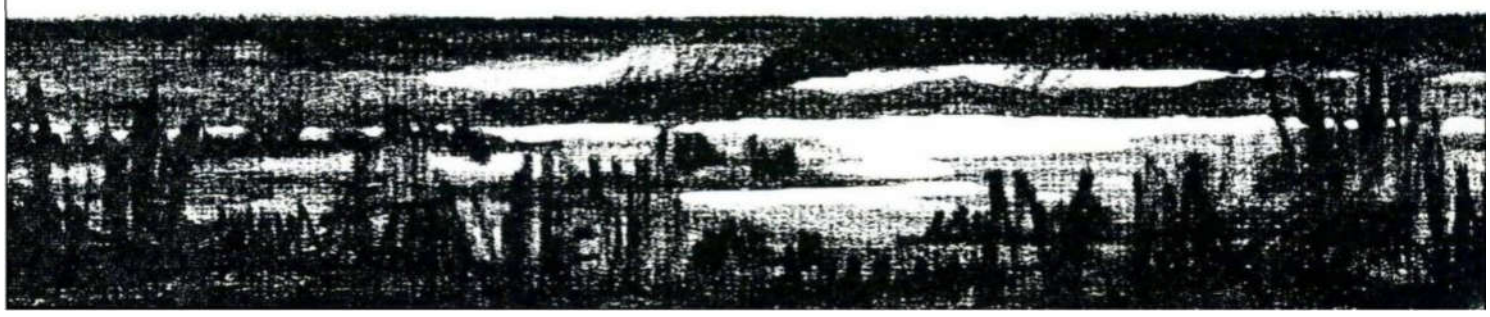


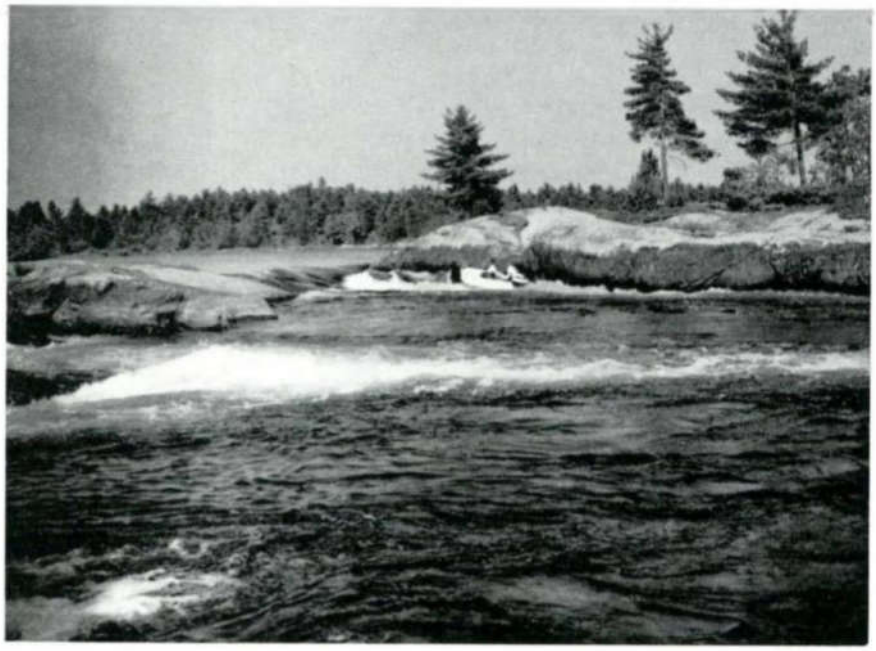
Games and ways of playing have a universality not limited by language or climate. What child has not played tag, or follow-my-leader? And who can resist paddling in shallow water, whether it is in a puddle on the road or alongside a grounded iceberg? Sand, too, is a fine plaything, no matter if it is in a box in the yard, circling a tree-fringed lake, or on an arctic beach. Half-built boats or houses are tempting places to play, and swings and see-saws can always be contrived, while the empty oil drums scattered throughout the north have great possibilities. Then there is the fascination of the moving picture, for there are few children who do not, at least occasionally, see such a show in school or makeshift hall. Toys must be improvised, but much can be done with bits of bone or wood or stone and scraps of fur and hide. These materials are transformed into dolls, simple or elaborate but always endearing, and deer bones are used for many games.



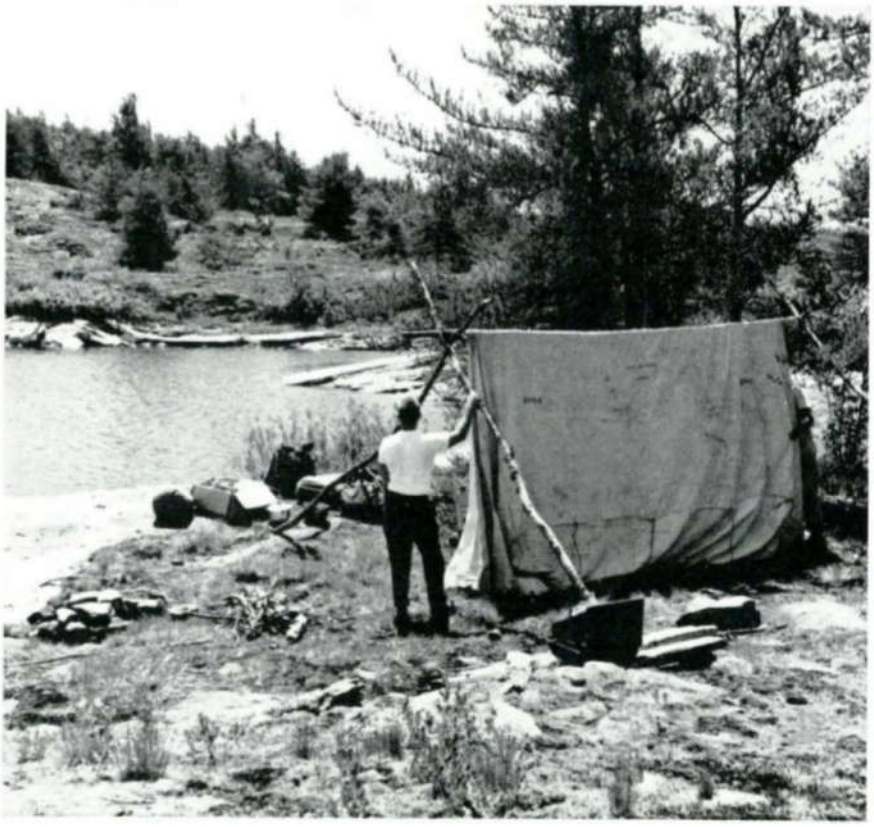
Home-made miniatures provide training for the skills of later life, for every child likes imitating adults, even when it means helping to unload cargo from a ship. A small toboggan and the pet dog start the future dog-team driver on his way, and model harpoons, snowshoes, cradleboards make learning fun, as does the organization in the far north of troops of Brownies and Boy Scouts. Always in this exciting world of the young there is something to do, something to learn.

Photographs in this pictorial are by Egon Bork, Bullaty-Lomeo, Rosemary Gilliat, Charles Gimpel, Richard Harrington, M. C. Kilvert, John Macfie, and Villy Svarre. Drawings by Leo Simoens.





A SHORT RIVER REVEALS EVIDENCE OF ITS LONG HISTORY

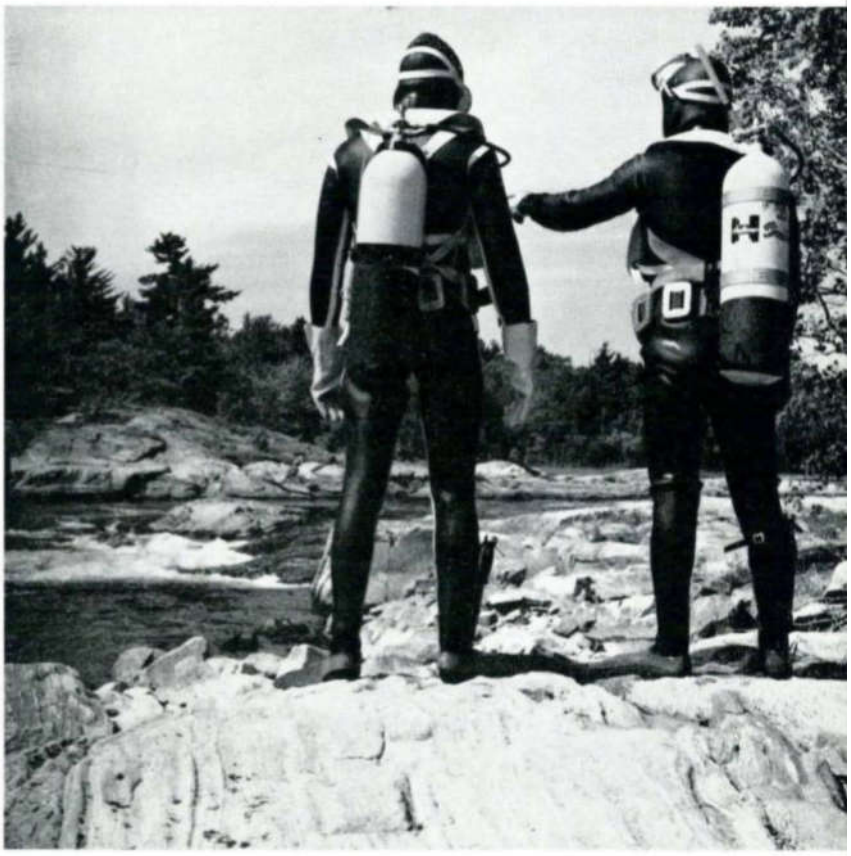


Photographs and story

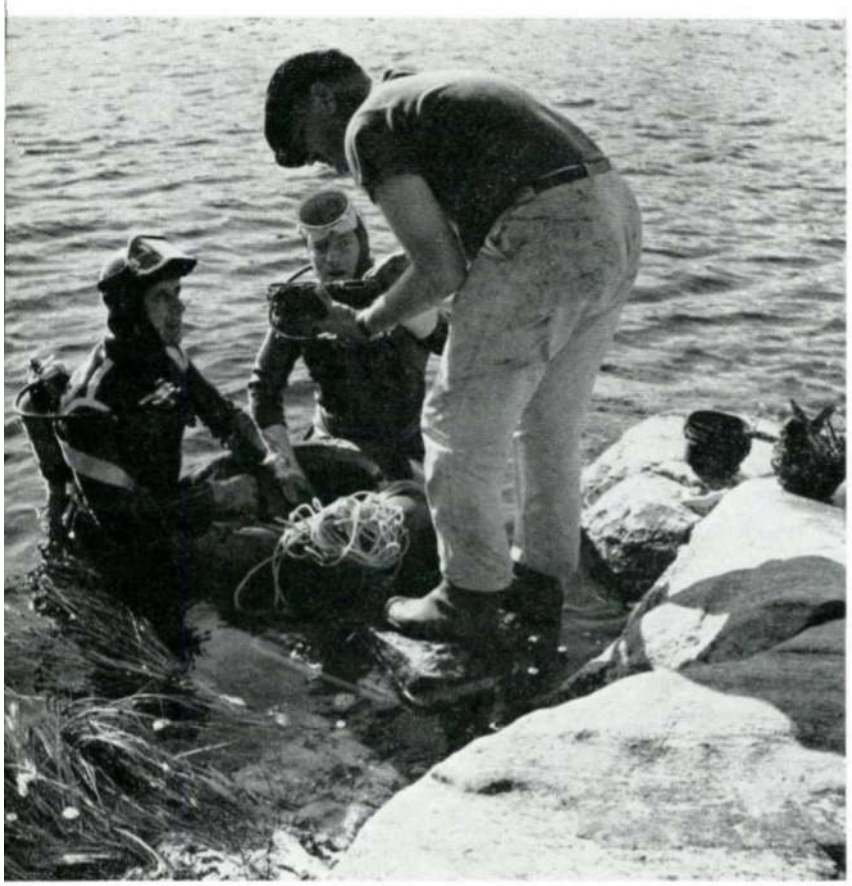
BY JOHN MACFIE

THE underwater search for fur-trade relics on the Voyageurs' Highway, begun on the Lake Superior to Rainy Lake section in 1960 (*The Beaver*, Spring 1961) was extended east of the Great Lakes in 1961 and 1962. The site was the French River, a stream which figured prominently in Canadian history from the days of Champlain. Out of Lake Nipissing the west flowing French (appropriately embellished with feature names like Chaudiere, Parisienne, Recollet and Voyageur) together with the east flowing Mattawa, formed a convenient canoe route across the height-of-land between the Ottawa River and the Upper Great Lakes in the days when hostile Iroquois commanded the Lower Lakes. It continued as a link in the fur-trade route between Montreal and the west until well into the nineteenth century. In those two centuries uncounted thousands of trade canoes passed back and forth on the French.

The French River is only sixty miles long, and even where its many channelled waters merge briefly before splitting again on the point of a low granite ridge, it seldom exceeds one hundred yards in width.



Letting the boat down the lower section of Double Rapids

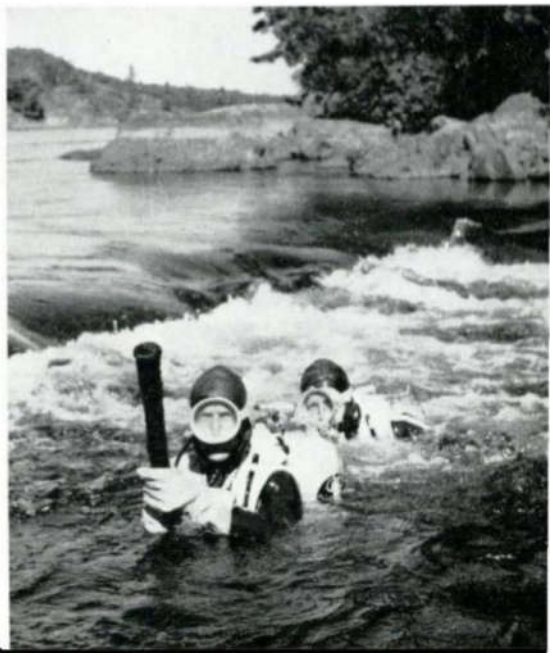


Divers Hughson and Sheppard give Carman Douglas of the Lands and Forests Dept a bundle of bone-handled knives cemented together with rust but still carrying bits of cord that bound them. Many relics of logging equipment were found, such as the king pin shown at right

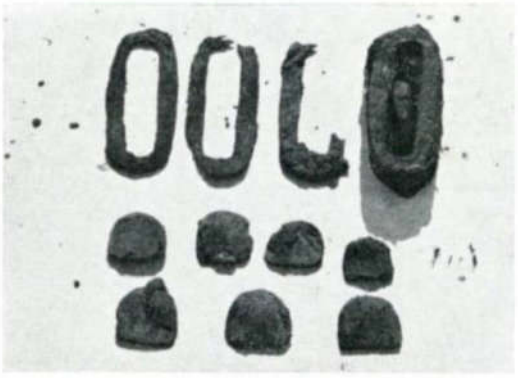
The main channel is interrupted by about a dozen rapids, most of which are mild enough to tempt a trade canoe in a hurry to run through, so it promised to be even richer in spilled trade goods than the section of the canoe route leading west from Grand Portage on Lake Superior. An exploratory investigation made in October 1961 by two Ontario Department of Lands and Forests skin divers, Jim Sheppard and Don Hughson, produced encouraging results. Double Rapids, about twelve miles below Lake Nipissing, was chosen at random for the trial run, and in two hours of diving a gun, axes, musket balls, beads, brass kettles, flints, fire steels, awls, ice chisels, and knives were recovered. This must be a fairly complete sample of the durable goods traded in the latter half of the eighteenth century, which the material seems to represent.

During the following winter plans were made to recover the rich trove imagined to be at the foot of each rapids on the main channel, but operations in 1962 emphatically denied the impression created by the success of the first attempt. Further work at Double Rapids added to the material already collected, but intensive searching of several more rapids yielded only a single bead and a fragment of pipe stem.

The absence of spilled trade goods below many of the rapids on the French River does not mean that trade canoes always negotiated them successfully. Sheppard and Hughson have concluded

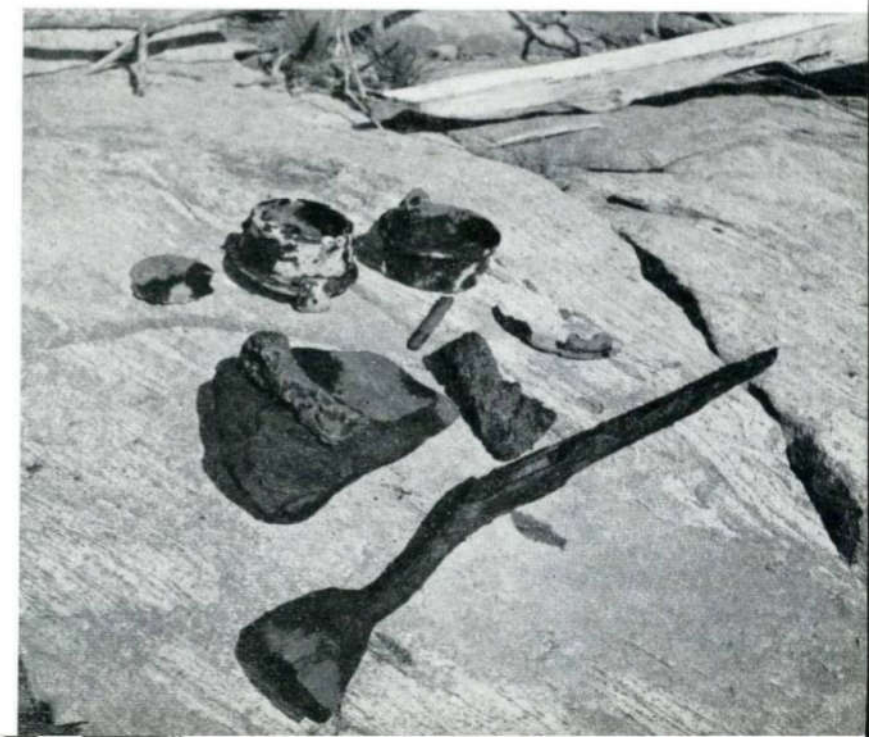


Results of two hours diving at Double Rapids in October 1961. Picture at right shows the bundle of fire steels, with three separated, and seven flints, apparently gun flints, that were jammed into the space in the centre of the steels



that a combination of features is necessary in rapids before they can catch and hold in an exposed position for two centuries any of the things that would fall out of an overturned canoe. Moderate stream flow and a clean rock bottom with crevices and boulders to trap artifacts evidently created the one rich site so far discovered on the French River. At the end of the season another good site was located.

The recovery program will continue until all the rapids on the main channel have been explored. The articles recovered at Double Rapids are to be turned over to the Royal Ontario Museum for study, and the results will be integrated with those of a similar project being conducted jointly by the Minnesota Historical Society and the Quetico Foundation along the international boundary west of Lake Superior. Most of the French River relics will eventually be displayed in museums in provincial parks situated on the old canoe route. ◆



A gun, two axes (one adhering to a stone), parts of three kettles, a bone knife-handle

Bust of Stefansson by Emanuel Hahn in the National Gallery of Canada *NFB photos*

Vilhjalmur Stefansson

BY ALAN COOKE

Mr Cooke, who has spent considerable time in the Canadian north, was from 1959 to '62 assistant librarian in the Stefansson Collection at Dartmouth College

I REMEMBER a morning, during the first year I worked in the Stefansson Collection, when a shy, rather nervous Dartmouth student came to see Dr Stefansson and revealed that he thought of writing a paper comparing Indian and Eskimo housing and would be glad to have any advice. Stef beamed upon him, caused him to be seated, and began: "Now you must understand that the tipi is the most inefficient means of housing ever devised—it is nothing more than a magnified chimney flue. . . ." The lecture described the tipi in its many forms, snow houses, sod houses, Indian and Eskimo furnishings, building materials, and site selection. After presenting in detail his own views, the speaker summarized the literature on the subject and concluded with an annotated bibliography; he offered suggestions for the organization of the paper and hinted that he might help to get it published if it turned out well. The interview was typical: Stefansson's enthusiasm and his authoritative grasp of the subject were dazzling; his speech, slow and distinct, and his elegant usage were a joy to listen to; his extemporaneous remarks might have been printed without apology as he spoke them; his eagerness to assist the uninformed student was as great as his pleasure in assisting a distinguished scholar or an old friend.

It was an education to associate with Stef. His wide-ranging mind had led him, during a long life, to take professional interest in many subjects not obviously connected with polar research. Indeed, I soon learnt that to think of him only as an explorer and scholar of the polar regions was to belittle him. His reverence for truth and his dedication to its diffusion place him with the great humanists. Everyone who knew him well will agree, I think, that his was one of the great minds of our day.

He had followed a long road from Arnes, Manitoba, where in 1879 he was born, to Hanover, New Hampshire, where on 26 August 1962, he died. The road led him to the discovery of new lands and unknown people, to acclaim and high honours in the world's capitals and centres of learning, and finally to retirement in the extra-

ordinary library he had collected, where he enjoyed the affectionate and admiring respect of younger scholars who came to read and stayed to listen.

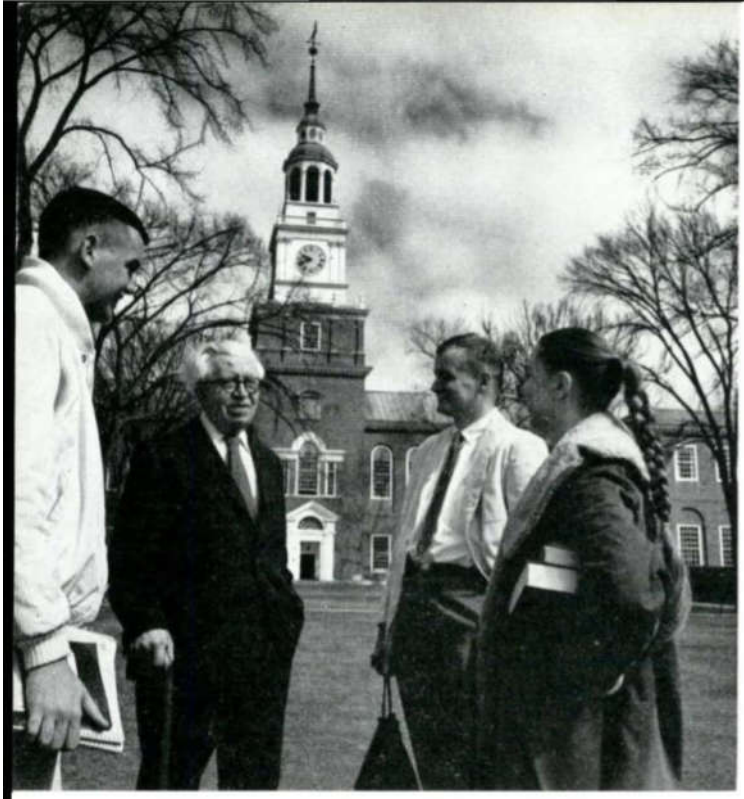
Stefansson spent 10 winters and 13 summers in the Arctic during three expeditions. In 1906, on his first arctic journey, he travelled overland to the Mackenzie River delta to meet other members of the Anglo-American Polar Expedition, of which he was ethnologist. But the expedition's ship got caught in ice north of Alaska and never arrived at the rendezvous. Stef was left to face the winter with little more than the clothes he wore and a thorough knowledge of the African literature, for he had been preparing himself for field work in Africa. Rather than count the season wasted, he joined a family of Eskimos and learnt to live and hunt as they did. When he returned south the next summer, he had already formed plans for a second expedition.

In 1908 he returned to the Arctic with R. M. Anderson, a classmate and friend from the University of Iowa, and they remained in the field until 1912. Anderson made important biological collections, and Stef discovered in the Dolphin and Union Strait region a large group of Eskimos, most of whom had never seen a white man. Because he spoke their language fluently and had learnt to live and to think as an Eskimo, the primitive group accepted him—as a stranger, of course, but as an Eskimo. Through conversation and co-operation he was able to observe a people of pure Stone Age culture at their first moment of acculturation.

In 1913 Stefansson took to the Arctic a full-scale scientific expedition supported by the Government of Canada. R. M. Anderson, who had joined the Geological Survey, was given charge of the Southern Party of the Canadian Arctic Expedition. Stef was leader of the Northern Party and commander of the whole expedition. The extent of Anderson's control over the activities of the Southern Party had not been clearly defined before the expedition entered the field. In the end, Anderson and most of his men dissociated themselves almost entirely from Stefansson and the work he wanted to do. Stef proposed to travel north over the moving sea ice to search for new land and to live by hunting during this journey. Most members of the expedition thought this plan suicidal, for every informed person, White and Eskimo, agreed that there could be no game on the sea ice. But Stef was never one to accept common knowledge as truth. He saw no reason why there should not be as many seals on the moving sea ice as there were near shore. On this opinion he staked his life—and he found seals aplenty. In 1915, travelling in this fashion with three companions, he discovered Borden Island; in 1916, with two companions, he visited Meighen Island and discovered Lougheed Island.

The accounts of his three expeditions, *Hunters of the Great North*, *My Life with the Eskimo*, and *The Friendly Arctic*, must be reckoned among the best of travel books. Their style, urbane, fluent, faintly biblical, carries the reader fascinated from one event to another, from one idea to another. The trilogy is not only an encyclopedia of arctic lore and a delightful narrative of unusual deeds, it is also a demonstration of the development of a fine critical mind. In all his books, Stef tried to show that

With the Canadian Arctic Expedition, winter of 1913-14. J. R. Cox and K. G. Chipman, topographers of the Canadian Geological Survey, Stefansson, Daniel W. Blue, chief engineer of the schooner "Alaska" who died in 1915. Photographer for the expedition was George H. (later Sir Hubert) Wilkins



Dr Stefansson talking with students in front of the Baker Library, Dartmouth College

human activity of every kind is limited not by environment but by the preconceived judgment and the closed mind. The final sentences of *The Friendly Arctic* (first edition) make this clear:

> To the members of our expedition the glamorous and heroic Polar Regions are gone and in their place is a friendly but commonplace country. To the reader the same will be true in proportion as he succeeds in seeing, either through this narrative or through our technical volumes [Reports of the Canadian Arctic Expedition], that it is the mental attitude of the southerner that makes the North hostile. It is chiefly our unwillingness to change our minds which prevents the North from changing into a country to be used and lived in just like the rest of the world.

During the 1920s, Stef took up a life of writing and lecturing. He became known as an authority on polar regions and as a stimulating and entertaining speaker. During this period, beginning with a gift of duplicate polar books from the American Geographical Society, he determined to build up a research collection of published and unpublished material related to the polar regions. His home-office-library in New York City's Greenwich Village became a research centre and clearing-house for almost everyone in North America connected with polar research. Stef accepted many research contracts from industries and federal departments. His mastery of the polar literature, his experience, and his world-wide personal connections made him an extraordinarily helpful adviser to other workers in the field. During the 1930s and 1940s he carried on with marked success simultaneous careers as author, lecturer, and consultant. In 1952 Dartmouth College acquired the Stefansson Collection through the generosity of Mr Albert Bradley, an alumnus. The College retained Dr Stefansson as consultant to its Polar Studies Program and Mrs Stefansson as librarian in the Collection.

It was at Dartmouth that I met Stefansson and came to know well some aspects at least of his mind and work. I soon formed the opinion that he was one of the gentlest, most considerate persons I have known. But when I began to learn something of the controversies in which he had been involved, I realized with surprise that many persons must have detested him, for there were a number of animosities resulting from personality and authority conflicts during the Canadian Arctic Expedition and from the tragedy of the Wrangel Island Expedition, which he had organized and supported. And I suppose some persons must have found him insufferable. Stef was evidently untroubled by self-doubt in any form, and he must often have enraged the established authorities whose views he attacked, for his expression of unorthodox opinion was at once colourful and unreserved.

Conversation with Stefansson occasionally led him to some comment on what he thought to be the importance of his work. Many persons, he knew, consider that his greatest contribution was, by precept and example, to remove from the public mind the association of fear with thoughts of the Arctic. But Stef believed that more important were the philosophical principles that made such a contribution possible. "I have tried to spread the truth," he said many times. And in this connection he often remarked that we should have a University of Unlearning, where we might rid ourselves of the prejudices and preconceptions impressed into us during our schooling. I think it was the example of a long-continued and successful exercise of a wide-minded, reflectively critical intelligence brought to bear on many problems that he regarded as his best contribution. It is of secondary importance that his work has been largely associated with the polar regions; it might quite as well have been devoted to Africa, to the conquest of outer space, to deeper knowledge of the antiquity of man, or to the more secure establishment of civil rights—a few of the subjects in which he was profoundly interested.

Stef's greatness lay in the universality of his intellect and in his concern for the human condition. These qualities made his genius, as they made Nansen's, impossible to confine in a narrow specialty. They gave his writing an importance beyond that of his subject matter. They make his long and useful life a lesson in humanity. ◆

ARTISTS OF THE TUNDRA AND THE SEA

by Dorothy Jean Ray

University of Washington Press, Seattle, 1961. 170 pages. Illus. $5.75.

Review article by George Swinton

EVEN if it were for no other reason than its definite relevance to the Canadian scene, *Artists of the Tundra and the Sea* by Dorothy Jean Ray is certainly worthy of wide attention. Yet *Artists of the Tundra and the Sea* is also one of those paradoxically useful books which one wants to recommend, though not without some caution, and which, though one might readily argue with it, one cannot easily dismiss.

Mrs Ray's book is interesting, knowledgeable, readable, and controversial. It seems convincing through its straightforward presentation of all kinds of evidence and source material. Nevertheless, it does mislead a bit, because neither source material nor evidence have been subjected to sufficient scrutiny.

The quality of the book lies obviously in the quantity of the material collected, and then presented without the usual judicious editing "to prove a point." In this regard *Artists of the Tundra and the Sea* should prove extremely valuable as a starting point for further anthropological or other research and as a fascinating source of information for the general reader interested in the original cultures of North America. But it is doubtful that it could and should be used as a standard reference book (as indicated on the dust jacket), because of qualitative shortcomings which are noticeable.

One might perhaps start with the title, because—geographically—"the Tundra and the Sea," as discussed in the book, refer only to a very small strip of northwestern Alaska, and—aesthetically—the "Artists," as described by Mrs Ray, cannot be called artists by any stretch of the imagination (and she implies this herself!). "Ivory Carvers" might have been a more fortunate term or even something like "Artists and Craftsmen" could have been used. But "Artists" in the context of the book is an unfortunate exaggeration.

Nevertheless, it is probably this very faulty concept which makes the book so important for Canadians, and particularly for those who are concerned with the development of Eskimo "art" in Canada. We could learn a great deal from the experiences and the development of the Eskimo carvers of Nome, King, and Diomede Islands, as described so vividly and honestly by Mrs Ray. They indicate, I am afraid, a very close parallel to the developments in our own Eastern Arctic.

These developments—rise and fall—are simple enough to be observed. Yet while Mrs Ray records these facts as facts in an anthropological sense she also, unwittingly, raises the inferior products of contemporary carving to the same high levels as the arts of the near and ancient past, by giving all equal attention and by not questioning the new standards and values (which, from the factual point of view, might well be a very good thing in itself). But art history is not as kind as Mrs Ray and does differentiate between quantity and quality.

An analogy will clarify this point. T. S. Eliot may have written much less than, say, Erle Stanley Gardner, but there cannot be any doubt as to who is of greater significance in literature. And although Mr Gardner may be read, and is understood, by more than is Mr Eliot, this does not indicate their relative artistic merits but, instead, indicates the type of civilization we live in, and what is and is not to the popular taste. Furthermore, while Mr Gardner, as a writer of murder mysteries, is certainly a master of suspense, no one would call Mr Gardner a great poet or novelist, nor the writing of murder mysteries literature. Yet murder mysteries are certainly a part of our culture and as such they are anthropologically and sociologically interesting.

Mrs Ray describes the contemporary ivory carving activities of the northwest Alaska Eskimo as if they were art, though on several occasions even she seems to be overcome by doubt about her otherwise unabated and infectious enthusiasm. She also reports the different opinions on standards of carvings among the carvers, but here again—as among Canadian Eskimo carvers and, probably, as among mystery writers—these evaluations relate only to standards among producers of a certain type of product, and do not question the values of these products or the standards themselves.

In a more specific sense, Mrs Ray actually refuses to separate the kind of carvings which might be art from the products that are purely souvenir types of carvings, excellent as the craftsmanship of the latter may be. Here in Canada, we are making the same mistake and, as a result of it, a kind of artistic Gresham's Law has made itself felt, for bad art is driving out good.

Again, it is precisely here that Mrs Ray's honesty and integrity are of such value and interest. Let me quote a few of her vivid descriptions:

". . . A man carves small objects today, however, for other reasons. For example, if he is short of ivory he will make only bracelets, billikens, or very small animals, but not large animals, paper knives, or birds. Paper knives, in particular, waste a large amount of ivory.

"Using a tusk to best advantage also means making items that bring in the most income for the amount of ivory used plus the amount of time consumed in carving them. . . .

". . . . In the earlier days, when carvings had not reached their present economic importance, many more objects of a more fragile nature were made . . .

". . . Another important guidepost for the carver in what he is to make, is the demand of the customer at a particular time. Likes and dislikes of collectors have changed throughout the years, and an item of immense popularity thirty years ago may collect dust in a shop today. The carver is kept posted on present popularity and need for objects by both the Alaska Native Arts and Crafts Clearing House in Juneau and the local stores . . .

". . . Originators usually are those who do not have to depend on the immediate sale of their products, but, even at that, they are few in number. . . .

". . . Very often another carver will not adopt a new design or make a new

object because he is suspicious of its potential success on the market. Sometimes a carver will wait months or years to gauge the success of an innovation. Moreover, a carver may not care to add another object to his repertoire for, although versatility is highly prized, competence is acquired through a constant practice of a limited number of items. If a carver has found a few specialties that he not only carves well but has no trouble selling, he will confine himself to these. . . ."

The relevance of these passages to Canadian Eskimo carving practices is unquestionable. And, speaking of Canadian Eskimo carving, the Canadian reader might be uncomfortably surprised, or even shocked, to read Mrs Ray's references to it, as derived from *Canadian Eskimo Art*, first published by the Department of Northern Affairs in 1954.

While that beautiful (and inexpensive) booklet is written most poetically, and has sumptuous illustrations, it is very hard to understand why it has been republished so often, when those responsible for it, at the Department of Northern Affairs, must (or should) have known that so much of the information it contains is either no longer applicable or was inaccurate in the first place. No wonder that Mrs Ray was misled by it or felt obliged to question its veracity (p. 140). Perhaps the sincerity of Mrs Ray's own book will arouse some Canadian to write an equally objective work on Canadian Eskimo art activities or, at least, will shame the government into revising (rather than reviving) their outdated and misleading publication.

In summary, Mrs Ray's fascinating *Artists of the Tundra and the Sea* makes good reading and deserves wide distribution. In spite of the book's few apparent shortcomings—and even though the more than a hundred illustrations are not as glamorous as they are well selected and organized—its valuable information, its interesting content, its clear-cut honesty, and its simple language recommend themselves.

Well known artist and professor at the University of Manitoba school of art, Mr Swinton is keenly interested in Eskimo arts and crafts and has made some notable collections of Eskimo carvings, one collection being acquired by the Winnipeg Art Gallery.

MEN OF MEDEEK

By Will Robinson as told by Walter Wright

The Northern Sentinel Press, Kitimat, B.C., 1952. 93 pages. Order from Stan Rough, Box 2364, Main P.O., Kitimat, B.C. $1.50 plus 10c postage.

Reviewed by Wilson Duff

THE Tsimshian Indians of the Skeena River place great importance on their family histories, and preserve them in the form of long epic narratives, memorized by a few chosen members of each generation. *Men of Medeek*, the traditional history of the Grizzly Bear People of Kitselas, is one of the most complete of these yet recorded, and ethnologically one of the most important.

The narrative was recorded in 1936 by the late Will Robinson of Terrace, in the course of many sittings with the late Walter Wright, Chief "Neas-D-Hok" of the Kitselas. In preparing it for publication, Robinson paraphrased it into more literary English (". . . the forests marched in unbroken ranks" p. 3), and set it out in short, single-thought paragraphs and 46 brief, single-episode chapters. The result, as intended, succeeds in recapturing the dignity of style and episodic rhythm of the original Indian narrative. Indian names are rendered less accurately than one might wish; however a map is provided which locates all the places referred to in the text. If the manner of presentation is Robinson's, the story itself, in its sequence and details, is Wright's. The reviewer has a copy of the same story, recorded ten years earlier from the same informant by William Beynon, which is virtually identical.

The Kitselas ("people of the canyon") are one of the 26 Tsimshian-speaking tribes of Northwest Coast Indians, and formerly occupied a pair of villages on the canyon 80 miles up the Skeena, a central location between the coastal Tsimshian and the Gitksan farther up the river. The tribe consisted of family groups representing each of the four Tsimshian clans. *Men of Medeek* is the history of one of the clans, of which Medeek, the Grizzly Bear, is the principal crest. Versions of the same story are owned by related families in the other Tsimshian tribes.

The narrative begins at "Tum-L-Hama" or Temlaham, the traditional homeland farther up the "Ksan" (Skeena) near the present Hazelton. Here, as ages pass, the prosperity and happiness of the people are disturbed only when they become forgetful and violate natural laws by mistreating animals. Two such violations bring on devastating encounters with the mountain goat people and with Medeek, a supernatural grizzly, and both of these are perpetuated as crests. Another violation results in a famine, and the people are forced to seek new hunting grounds. They migrate downriver, and after uneasy alliances and vengeful wars with the earlier inhabitants, take control of the canyon and make it their new home. Now in contact with coastal people, they become able seafarers, and raid coastal villages to the south. Some of them find the coast to their liking, and settle at Kitkatla, accepting an invitation to become chiefs there. More ages pass; more wars of revenge; newcomers join them from Kitamaat and from down the river. There is an encounter with the beaver people. The tribe grows, splits into two, and moves from site to site, as it progresses into recent times.

In its blending of myth with historical fact, and of the supernatural world with local geography, this is a classic example of history as the Indians know it. Readers familiar with this beautiful part of the country will find new insight into how their Indian predecessors viewed it, new associations for old landmarks. To the ethnologist the main importance of *Men of Medeek* lies in what it reveals about the persistent movement of people down the rivers to the seacoast in this area in prehistoric times. Here, heavily veiled in myth, is important information on the prehistory of the Tsimshian.

Getting *Men of Medeek* published required a devotion to local history comparable to that shown by Will Robinson in getting it written down. In Stan Rough and his associates the Skeena area has such devotees: to finance the book's publication they simply reached into their own pockets. The result does them great credit.

Mr Duff is Curator of Anthropology at the Provincial Museum of British Columbia. He has published numerous papers on subjects relating to the British Columbia Indians.

ADVENTURERS FROM THE BAY

by Clifford Wilson

Macmillan, Toronto, 1962.
159 pages, illus. $2.50

AN encouraging move towards the affirmation of a Canadian identity is the increased interest shown by publishers in putting out books of Canadian background for young people. One such series is Macmillan's Great Stories of Canada, written by reputable authors and attractively produced. Our explorers were rugged, our Indians were colourful, our missionaries were bold, our settlers were brave, our lawmakers were determined; not every one, of course, but enough. In our own vast country are all the ingredients for adventure stories and drama, for heroes whose deeds may well provide the inspiration that kindles the young. These stories, well presented, may indirectly develop a feeling of nationalism that will prove of great benefit to the future of Canada.

A recent recruit to the ranks of authors employing their talent for the edification of young readers is Clifford Wilson and the theme of his book is men of the Hudson's Bay Company. With these men, Mr Wilson is very much at home since eighteen years of his distinguished career (he is now assistant director of the National Museum of Canada) were spent as historian for the H B C and editor of *The Beaver*. From the many remarkable men who served the Company from the seventeenth century onwards Mr Wilson selects a few whose outstanding achievements have, for the most part, received totally inadequate recognition. They range from Radisson to Kelsey, Knight to McLoughlin, Campbell to Smith (or Lord Strathcona)—and he does not forget the nameless voyageur. One is glad to note the stress on the friendly approach to the Indian rather than the exterminating approach. With Mr Wilson's knowledge of his material and his insistence on the accuracy of what appears in print, if he has anything to do with it, there is no question of this being anything but the truth about the Adventurers. The writing is of a calibre that makes good reading for an adult and the lively illustrations by Lloyd Scott are the result of careful research.

This being so, it seemed reasonable that the final judge as to the appeal of the book should be the young people for whom it was written. We accordingly asked some Grade 7 pupils in a major work class, all of them keen readers, to write down frankly that they thought about it. Here, in their own words, are their views:

Dr John McLoughlin travelling across the continent. One of Lloyd Scott's illustrations

Adventurers from the Bay is an exciting, fast-moving book. It is never boring and has real appeal for young readers. I think of it as a book which has put complex ideas into simple, everyday language. This book, besides being fast-moving, is also very exact and full of interesting details. It tells of many brave men, and the accomplishments which made them famous.

By the time I had finished the first chapter, I could tell that it was going to be an interesting book. From then on I could not wait to read the next chapter.

When I finished the book, I felt that I had learned something about how to study history and really enjoy it. I feel that this book offers worthwhile reading for people of any age.—*Jack Di Cosimo*

This is a book report on *Adventurers from the Bay* by Clifford Wilson

This book has an appealing urge to it. I find that it is a historical account in a very amusing form. Once I started to read it, I just couldn't stop. Every chapter in this story has a mystery in it. The excitement forces the reader to finish the chapter.

Mentioned in this book are many interesting facts which were unknown to me before. The illustrations are extremely good. This carefully written book not only describes the adventurers involved, but also tells us of their backgrounds.

It also increases our understanding of history, as the author gives good explanations for events which occurred. For instance, he tells us why the companies fought each other for the furs of this rich continent, and why men like Radisson travelled into the unknown wilderness to discover new trade routes.—*Jim Gnitecki.*

Adventurers from the Bay is a very enjoyable book. The fact that especially appeals to me is the fast action which is unlike most history books that drag along and in time become quite boring.

This book is written especially for young people, but can be enjoyably read by a person of any age.

The author, Clifford Wilson, has tried to make his book still more interesting by gathering some out-of-the-way incidents which are exciting or rather humorous.

The part I found most interesting was about the crafty French explorer and fur trader, Pierre Radisson, and how he managed to keep a fur trading post on Hudson Bay without permission from the Hudson's Bay Company.

This book must have taken a great deal of research by its author but the resulting book is well worth the effort.—*Eric Haar*

SOCIAL NETWORKS IN GREAT WHALE RIVER:

Notes on an Eskimo, Montagnais-Naskapi, and Euro-Canadian Community.

by John J. Honigmann

National Museum of Canada Bulletin No. 178, Anthropological Series No. 54, vi-110 pages, illus. Queen's Printer, Ottawa, 1962. $1.00.

Reviewed by R. W. Dunning

THIS monograph is based on field-work during the summers of 1949 and 1950 in Great Whale River, Hudson Bay. There are complete descriptions of domestic group dispositions, giving household composition and kin affiliations. There are partial descriptions of both Eskimo and Indian social organization, economic activity, vital statistics, dress, way of life, religion and recreation, as well as a discussion of interaction between members of the three groups, Eskimo, Indian and Euro-Canadian.

This work attempts to be complete neither as ethnography nor as analysis of the social system. The author frankly states that it is meant to supplement, as background material, a more recent field study of the community. But it is a valuable document, full of careful descriptive comment about a post World War II northern community. The author rightly sees that socio-political discussions cannot ignore the role of the Euro-Canadian in the system. The descriptive material on domestic group dispositions is a significant contribution.

To the general reader this may appear to be a simple description of every day life, perhaps even a matter of commonplace. The work is in fact in the tradition of modern ethnographical studies. Anthropological study rests heavily on carefully documented studies in which apparently obvious details are included. It is only by such detailed studies that the aim of anthropology can be approached. This is generalizing about human and social behaviour. The reviewer here would make a plea directed toward those experienced northern persons, especially post managers. It is just these kinds of data, the obvious and commonplace facts of observation about communities in the present day which prove to be of value to the anthropologist. If "old timers" would record details about domestic group affiliations and changes in their respective communities, an invaluable body of information would be preserved.

Dr Dunning is in the Department of Anthropology and Sociology at the University of British Columbia. His study of a northern Ojibwa community was published in 1959.

EXPEDITIONS TO THE CANADIAN ARCTIC

by P. D. Baird

The Beaver, Hudson's Bay House, Winnipeg 1, Man. 16 pages, 35 cents.

THIS very useful outline of sea voyages and land expeditions to the Canadian Arctic, from earliest times to 1918, has now been re-run by the Hudson's Bay Company. Prepared by P. D. Baird, who was then Director of the Montreal office of the Arctic Institute of North America, it was published serially in *The Beaver* in 1949. The pamphlet is an excellent ready reference to the major expeditions of discovery. In chronological order it lists concisely the date, the leader of the expedition and other important members, the names of vessels involved, objects of the expedition, results and important discoveries. Finally it names publications describing the expedition. Altogether a vast amount of information, conveniently assembled.

The first run of the pamphlet was exhausted some years ago but it has been in steady demand and we are glad that for the modest sum of thirty-five cents it is once more available.

FUR AND GOLD

by Roderick Haig-Brown

Longmans Canada, Toronto, 1962. 131 pages, illus. $2.75.

THE jacket blurb of this small book, one of the Canadian Pageant series, leads one to suppose that it is concerned entirely with the career of James Douglas, chief factor of the Hudson's Bay Company and later governor of British Columbia. But such is not the case. Quite a lot of it is about George Simpson, a bit about Dr McLoughlin, and a bit more about John Tod. A whole chapter, in fact, is devoted to the tale of how Tod outfoxed the Indian war party by vaccinating them against smallpox. But this, like some of the other tales and passages, has all the appearance of padding.

The book is supposed to have been written for "young readers": but one wonders how young. There are numerous long quotations from official letters and speeches, which the typical young reader will surely eschew. Yet every now and then there occurs a lively description of happenings at Fort Victoria, or at the Fraser gold diggings, and so on, which make the reader, young or old, wish for much more of the same. The conversations are obviously fictional but they are well done, and help to recreate the life of those days when the Company held sway over that wild and spectacular land which became, under James Douglas as first governor, the Province of British Columbia.

As for the few illustrations, the less said about them the better.—C.P.W.

SUBSCRIBE TO The Beaver

Published quarterly, One year $2 ☐ Three years $5 ☐

Mail this form with remittance to

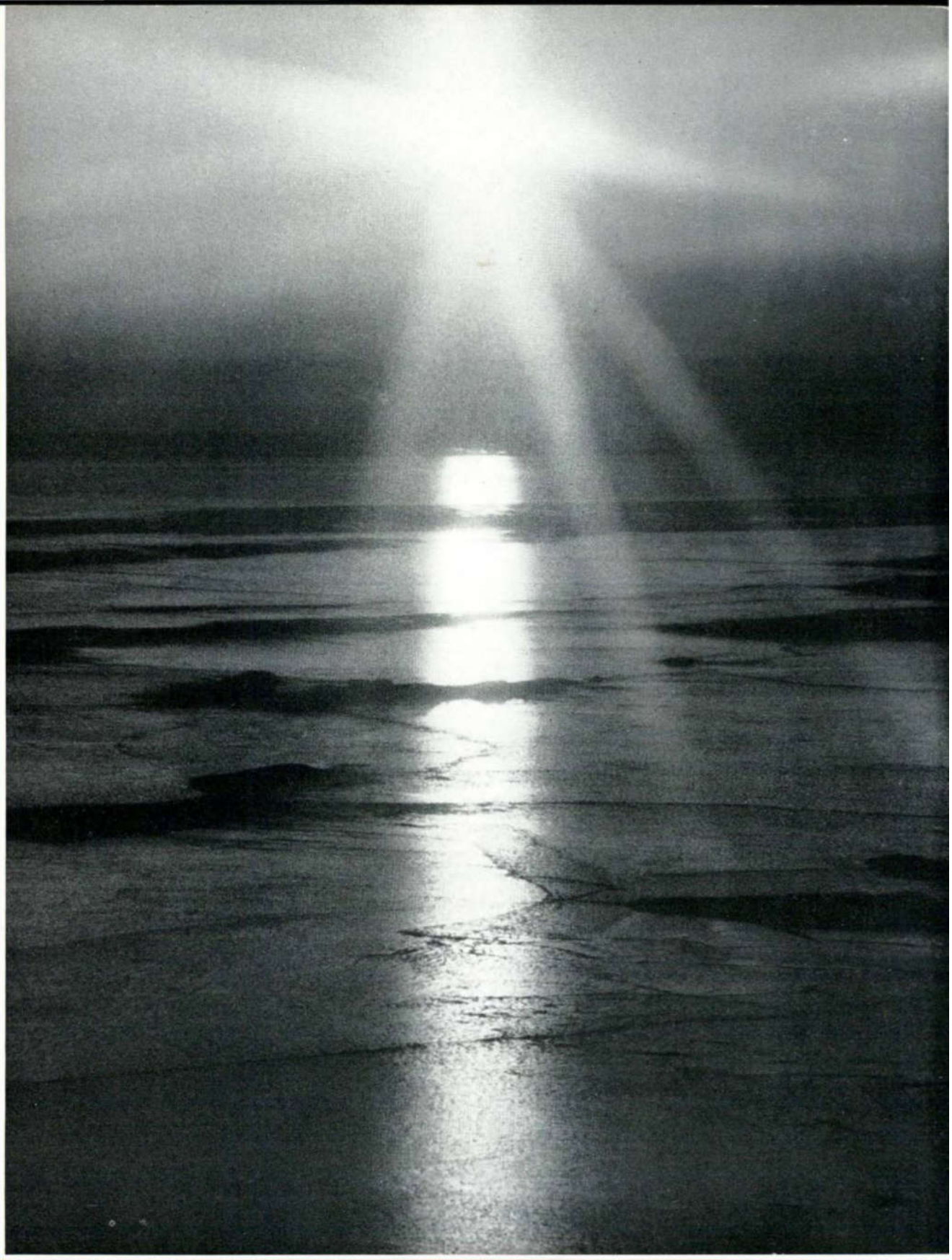
The Beaver, Hudson's Bay House, Winnipeg 1, Canada

(Please make cheques payable to Hudson's Bay Company)

NAME.....

ADDRESS.....

.....



MIDNIGHT SUN IN ARCTIC CANADA

by Egon Bork

Properties by kind permission The Royal Ontario Museum, Toronto

The unchanged Standard

Now, as nearly 200 years ago, the Hudson's Bay "Point" Blanket is woven in England from 100% virgin wool. Extravagantly practical, with its reasonable price and unique reputation for lifetime service, its standard of quality has remained unaltered over the centuries.
For your nearest place of purchase write to: Hudson's Bay Blanket Division, Hudson's Bay House, Winnipeg, Canada

Hudson's Bay Company.
INCORPORATED 2ND MAY 1670.